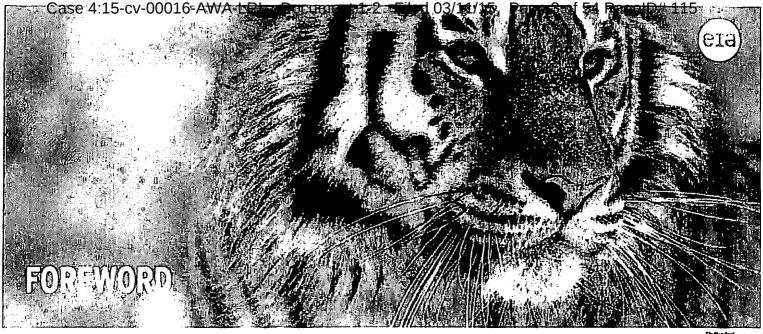
EXHIBIT B

LIQUIDATING THE FORESTS

HARDWOOD FLOORING, ORGANIZED CRIME, AND THE WORLD'S LAST SIBERIAN TIGERS





The forests of the world are facing an environmental, social and economic crisis fueled by growing demand for cheap wood and timber products in the United States, China, Japan, the European Union and elsewhere. Trees are felled illegally in one country, trafficked across another and marketed in a third. The destructive impacts affect every country in the world as well as every company trying to compete while using legal and sustainable wood in their products.

We are now, as an international community, at a tipping point of addressing the problem of illegal logging. For the first time in history, countries are enacting measures to prohibit the trade in stolen wood. The U.S. Lacey Act, amended in 2008 to ban the trade of illegal wood and forest products, was the first. Europe and Australia have recently followed. As implementation of these laws is taking hold, the marketplace is showing signs of transformation. Reduced illegal logging rates have already been detected, in Indonesia for example, which are credited with eliminating more CO, emissions from the atmosphere than the Kyoto Protocol. The first major case involving the import of illegally logged wood was brought against Gibson Guitar Corp. in the United States, and the resulting closure of markets for ebony and rosewood from Madagascar has given that country's unique national parks a second chance.

This success now hangs in the balance. While Gibson was being investigated for importing stolen wood from Madagascar, the company launched a national campaign to gut the Lacey Act. The effort gained early traction but ultimately failed, and instead Gibson admitted in a signed agreement that it had imported ebony from Madagascar even though the company knew it was illegal to harvest that species. Major corporations around the world are now asking themselves whether they should change their practices or continue to buy the cheapest wood they can without regard to the legality or sustainability of its origins.

The last remaining Siberian tiger habitat in Russia's Far East is an example of a forest that some of the largest companies in the world continue to plunder. Liquidating the Forests details the organized crime of illegal timber harvesting in Eastern Russia, and tracks the wood across the border into China, through factories and warehouses, to its ultimate

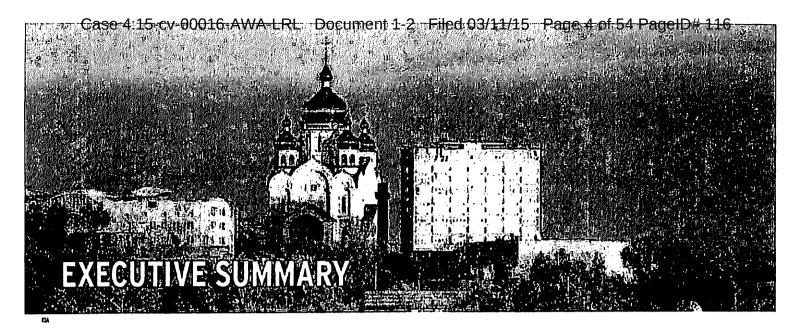
For the first time we have tools in place to deter and punish bad actors, promote legitimate businesses, and protect consumers from unwittingly supporting the destruction of the world's forests. We have an opportunity and duty to act now and ensure the world's forests remain intact for future generations.

destination in showrooms around the world. We found that what has now been known for a decade remains true: if you are using wood from the Russian Far East, whether for flooring, a children's toy, or a chair, you have to assume the majority was illegally logged and is therefore in contravention of new U.S., European and Australian laws.

The Environmental Investigation Agency (EIA) identified the worst actors in the Russian Far East and tracked their particular shipments. We quickly found the company with the most serious and direct links to illegal logging in Khabarovsk, the last frontier of old-growth hardwoods in the region. After a series of undercover visits posing as buyers, we were dismayed to find that its biggest customer was in fact the largest retailer of hardwood flooring in the United States, Lumber Liquidators.

Alexander v. Bjórnarde Alexander von Bismarck **Executive Director.**

Environmental Investigation Agency US



This report details the extent and nature of illegal logging in the Russian Far East (RFE), and tracks illegally harvested valuable hardwoods across the border into China. through factories and warehouses, to its ultimate destination in showrooms around the world. It is then purchased by consumers unaware of the devastating effects on the environment, local peoples and the forest industry, as well as on law enforcement and governance throughout the RFE. During a multi-year investigation by the Environmental Investigation Agency (EIA), Lumber Liquidators, the largest specialty retailer of hardwood flooring in the United States, emerged as the strongest example of a U.S. company whose indiscriminate sourcing practices link U.S. consumers to the destruction of critically endangered tiger habitat and forests in the RFE.

The RFE contains the world's last major stands of old-growth temperate hardwood forests, a unique biodiversily-rich ecosystem and home to the last 450 Siberian tigers remaining in the wild. This investigation reveals how demand for hardwood furniture and flooring in the United States, the European Union, Japan, and China is fueling corruption and a crisis of illegal logging in the RFE. China, the destination for 96% of the valuable hardwoods exported from the RFE, functions as a "black box" for illegally logged timber, in which the origins of illegally harvested timber are obscured as manufacturers mix it with legal sources. This oak, ash, linden (basswood) and elm hardwood flooring and furniture fills store shelves in the United States, the European Union, Japan, and China, where it is purchased by unwitting

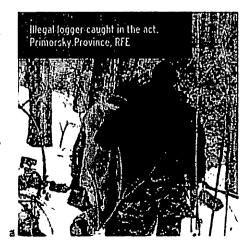
consumers, unaware of its illicit origins. In the RFE, due to the approaching exhaustion of valuable hardwood stocks in forests zoned for timber harvesting, protected forests are at risk of being completely overrun by illegal loggers.

Across the region, well-organized timber matias bribe and intimidate chronically under-funded regional authorities to establish systematic

China, the destination for 96% of the valuable hardwoods exported from the RFE, functions as a "black box" for illegally logged timber, in which the origins of illegally harvested timber are obscured.

control over harvesting, processing, trade and export of hardwood logs and lumber in frontier areas of Russia's "Wild East." The lack of federal funding for regional forest law enforcement and lack of support for prosecutions makes local officials particularly susceptible to bribery and corruption. High profits for both the Chinese and Russian mafia, alongside weak law enforcement, create an environment in which an estimated 50-80% of precious hardwoods cut in the RFE are harvested illegally.

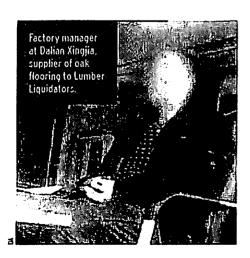
Russia's President Vladimir Putin recently decried the severity of weak forest governance. stating that, "The Federal Forest Management Agency and a number of provinces present deliberately distorted information, and law enforcement agencies work ineffectively or sometimes don't work at all."2 Late in 2012. Putin initiated a crackdown on international organized criminal elements within the Russian forest sector. In August 2013, Russian officials conducted a raid on a massive timber smuggling operation in Siberia. According to an official press release and a leading newspaper, this international criminal organization systematically purchased timber illegally harvested by many small groups of Russian loggers, laundered it through a series of companies set up only for one day for the sole purpose of trafficking timber. falsified documentation of origin, before finally exporting this wood to China.3 In an April 2013 meeting in Eastern Siberia with President Putin. Prosecutor General Yuri Chaika stated that

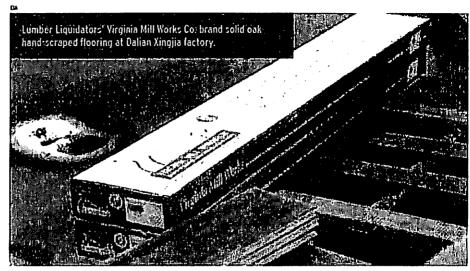


corruption was well established in the sector, including abuse of authority by representatives of the federal and local agencies active in forest management, noting that most of the wood is exported to China.⁴

In 2010 alone, illegal logging cost the RFE economy nearly 4 billion rubles in lost revenue and resources5 - and experts estimate that these figures, based only on officially registered losses, represent as little as 5% of actual illegal logging and associated trade.6 The illegal and uncontrolled harvesting has severe consequences for forest-dependent communities, the region's rich biodiversity, and the forest sector as a whole in Russia. It also causes negative long-term impacts on the future of wood product manufacturing in China, the United States, the European Union. and Japan, as supplies of precious hardwoods dwindle. Cheap illegal timber further undercuts legitimate operators by artificially driving down prices, threatening the viability of all companies that are playing by the rules.

Through a detailed analysis of Russian, Chinese, and U.S. customs records, EIA investigators identified dozens of Chinese companies that export hardwood flooring made from Russian oak to the United States. Posing as importers, EIA investigators went undercover in Russia with Chinese wood traders, a group that has come to dominate the forest sector in Eastern Russia over the past decade. In China, EIA undercover investigators questioned more than twenty different sawmill operators and flooring manufacturers about the sourcing practices of their U.S. buyers. While the conversations revealed an increased awareness of new





requirements for legal timber sourcing around the world, such as the U.S. Lacey Act, these Chinese flooring manufacturers reported that some international customers still did not demand legal wood.

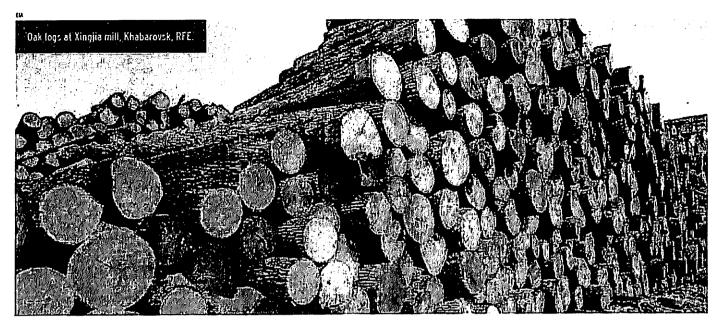
New regulations in the United States, the European Union, and Australia prohibiting the import of illegally sourced wood products have proven to be successful in decreasing illegal logging worldwide.7 These positive effects are fundamentally undermined by the failure of the world's largest timber importer - China - to take concrete action to prohibit illegallysourced imports, and by large corporations such as Lumber Liquidators who, despite these new laws, continue to buy the riskiest wood available in the world today. This report illustrates the immediate need for full implementation and enforcement of existing laws such as the U.S. Lacey Act, the EU Timber Regulation, and the Australian Illegal Logging Prohibition Act that ban trade in illegal timber. The report further illustrates the need for comparable laws in consumer countries that currently lack such policies, especially Japan and China, as well as international support for Russian domestic efforts to strengthen forest governance.

THE INVESTIGATION

The investigation combined analysis of Russian, Chinese and U.S. trade data, interviews with Russian-based authorities, non-profits and community members, as well as undercover communications and visits by EIA investigators in Russia and China posing as potential buyers of wood and wood products. A picture of

systemic illegal logging and "legalization" of illegal wood through falsified permits quickly emerged. This system is an open secret among industry members both in Russia and throughout northeastern China, many of whom showed a clear understanding of the high-risk of illegality in the Russian timber trade. In Khabarovsky Province, which contains highly valuable Siberian tiger habitat, the investigation identified the company of greatest concern regarding illegal logging operations to be a Chinese-owned wood-flooring company called Suifenhe Xingjia Economic and Trade Company ("Xingjia"). Xingjia operates three factories in northeastern China, as well as at least 14 sawmills throughout the RFE. Analysis of U.S. import records and undercover visits with Xingjia show that their largest customer is Lumber Liquidators in the United States.

During undercover visits and conversations with Xingjia from 2011-2012, Xingjia's president and chief managers described their operations in detail, including numerous instances of illegal harvesting, extensive knowledge of illegal operations throughout the Russian forest sector, and bribing of local Russian officials. On the first day of meeting in Khabarovsk, in the RFE, the president told EIA investigators that he overcut on his own concessions and explained a detailed system for laundering illegal timber cut outside of their concession boundaries using their harvest permits. Officials from Xingjia also revealed that the company sources over 90% of their stocks from high-risk trading companies throughout the region. This report illustrates that trading companies, which do not provide



proof of legality, are the primary mechanism for laundering illegal wood.

EIA subsequently found that suppliers named by Xingiia to our investigators or identified in Russian customs data had strong links to illegal logging. Three employees of one supplier identified by Xingjia, including the head of timber harvesling, were sentenced to prison in 2010 for illegal logging, and more company employees are currently under investigation for the organization of a criminal group that illegally logged significant quantities of valuable hardwoods during the period when Xingjia was actively sourcing wood from the supplier. A different supplier is the subject of a sweeping investigation by the Khabarovsky Province police into illegal logging of thousands of cubic meters of valuable hardwoods under the quise of "sanitary logging." These are the two largest cases of illegal logging to be uncovered in Khabarovsky Province in the past three years, and both firms under investigation are Xingjia suppliers.

In multiple conversations, Xingjia officials explained the need to bribe officials, noting that payments to officials can guarantee that they will avoid scrutiny from law enforcement. Xingjia officials also said that their operations are possible due to their high-level political connections with both Russian and Chinese officials.

Lumber Liquidators has sourced hardwood flooring from Xingjia since at least 2007. Beginning in 2011, the U.S. company has worked to strengthen its control over its global supply chains, through the purchase of their Shanghai-based logistics and quality control manager and streamlining of sourcing through fewer suppliers. Over the past five years, Lumber Liquidators

Another Lumber Liquidators supplier is the subject of a sweeping investigation by the Khabarovsky Province police into illegal logging of thousands of cubic meters of valuable hardwoods under the guise of "sanitary logging."

has continued to deepen its relationship with Xingjia, including reportedly visiting their mills in the RFE in May 2012. During EIA's tirst face-to-face meeting, Xingjia's president told EIA investigators posing as buyers that much of their wood was illegal. Lumber Liquidators has been a major purchaser of Xingjia's flooring over the past five years. In fact, according to Xingjia's

president, just a few weeks after EIA undercover investigators received a tour of Xingjia's operations in Russia, a high-level team from Lumber Liquidators arrived for a similar tour. (See "Lumber Liquidators and Xingjia: A Close Relationship," p. 12).

EIA's investigation clearly illustrates that Xingjia's oak supplies are riddled with illegal sources and that it is immediately apparent to anybody who asks them where their wood originates. U.S. import data and statements from Xingjia officials contirm that Lumber Liquidators is far from 'anybody,' and in fact is their single most prominent customer of oak flooring.

IMPACTS OF ILLEGAL LOGGING IN RUSSIA

Russia's far eastern forests provide habitat for a wide variety of animals and plants, comprising one of the most biodiversity-rich parts of the Russian Federation. Numerous villages of ethnic Russians, as well as an estimated 100,000 members of the Udege, Nanai, and Evenks indigenous communities, live in traditional villages throughout the RFE and are dependent on forests for survival. Various forest industries, from logging and wood processing to pine nut gathering and beekeeping, provide a critical source of revenue and sustenance for tens of thousands of families across the region. Bribery and corruption have had a pervasive impact on law and order throughout the region.

Illegal loggers often target key hardwood species, which are vitally important to the region's ecosystem. Three hundred year old Mongolian oak and great Korean pine trees nourish deer, boar and other animals, which in turn support populations of the critically endangered Siberian tigers (Panthera tigris altaica) and Far Eastern leopards (Pantera pardus orientalis), both among the rarest large animal species on the planet. The rapid rates of felling in the region, combined with inefficient harvesting methods, give forests no time to recover these losses. In addition, wasteful cutting practices negatively impact water quality, damaging valuable salmon fisheries.

The forests of Siberia and the RFE rival the Amazon in their size and importance as a carbon sink. Clear cutting, a practice that still accounts for more than 75% of all logging in Russia,^a has caused certain areas of permafrost forests in northeastern Russia to become "virtual deserts," and the release of methane from these degraded permafrost zones is a major source of greenhouse gas emissions. (See "Part 2: Impacts," p. 24).

ESTIMATES OF ILLEGALITY

A recent analysis by the World Wildlife Fund (WWF) compared the authorized legal harvest in 2010 for oak in Primorsky and Khabarovsky Provinces, where nearly all oak exports from the RFE originate, with Russian export statistics for the same year. This analysis found that twice as much oak was exported as was authorized, indicating that at least 50% of the oak exported in 2010 was illegally harvested.10 in 2007 and 2008, four times as much oak was exported as was authorized, indicating that 75% of exports were illegal in origin. However, highquality oak logs are relatively scarce in official forest concessions, remaining largely only in protective areas. It is therefore likely that many of the trees officially cut and registered in export records were actually cut elsewhere and laundered with official documents. This explains why numerous sources throughout Eastern Russia reported to undercover EIA investigators that at least 80% of all trees harvested are done so illegally. When questioned about what percentage of their sourcing is "black wood," a literal translation from the Chinese word understood to mean illegal, one Chinese sawmill owner in Eastern Russia said. "Almost

all of it is." At another sawmill, the owner told investigators that 80% of companies buy stolen wood from the small illegal logging brigades.

THE RUSSIAN FOREST SECTOR AND ITS DISCONTENTS

Most timber cut in the RFE is destined for export, and 96% of valuable hardwood exports flow directly across the border to China. Over the past decade, China has rapidly grown into Eastern Russia's largest timber trading partner, following China's 1998 ban on most domestic timber harvesting due to severe environmental damage caused by illegal logging in its own forests.

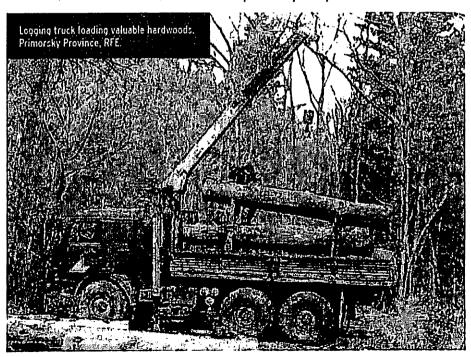
In 2012, 18 million m³ of logs, sawn timber, and veneer sheets were exported to China from Eastern Russia, making up 20% of China's total timber imports. A small but valuable and ecologically significant proportion of these exports consisted of precious hardwoods.¹ These species are notable for the critical roles they play in the temperate mixed hardwood ecosystems of the Sikhote-Alin range. Two decades of illegal logging have contributed to rapid depletion of commercially available stocks of valuable hardwoods. Now the best hardwood timber is found in protective forests, where logging is restricted by law. These range in scale, importance, and level of protection

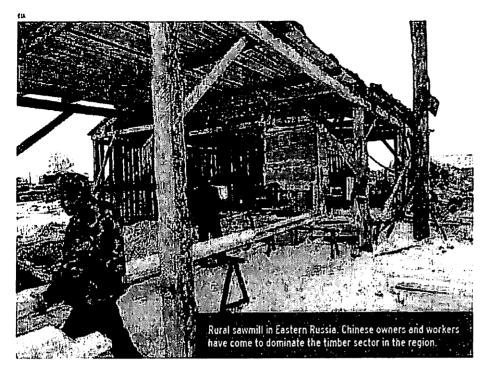
In 2012, 18 million m³ of logs, sawn timber, and veneer sheets were exported to China from Eastern Russia, making up 20% of China's total timber imports.

from national parks to special hydrological zones along streambeds, to forests set aside for pine nut harvesting or for traditional use by indigenous groups. Due to the rarity of high-quality, old-growth specimens around the world, these species draw a premium on global markets, and are valued three to five times higher than more common, fastergrowing hardwoods such as birch and poplar, or softwoods. (See "Part 3: The Russian Forest Sector and its Discontents," p. 28).

GOVERNANCE FAILURES THROUGHOUT THE SUPPLY CHAIN

Since the fall of the Soviet Union, local forest rangers have seen their funding cut to around 10% of what they received in the 1990s, severely impacting their effectiveness in patrolling vast public forest lands, and making them particularly susceptible to intimidation or





bribery.¹² President Putin recently noted that the number of state forest workers has declined to one seventh of previous levels, and that many of these workers are close to retirement age.¹³

Given that most commercially valuable limber now exists only in protective forests, the provincial agencies tasked with management of these forests hold a considerable influence over the timber sector in the RFE. For decades, local civil society organizations have documented extensive evidence of gross mismanagement by these agencies, a fact corroborated by local officials and even by the former head of the Forest Management Agency of Primorsky Province, according to an undercover interview with Russian State TV in 2010.4 Officials allow loggers to extract millions of cubic meters of valuable timber in areas set aside for essential conservation under the guise of "sanitary logging," or "intermediate logging," in which diseased, dving, and poorly formed trees should be cut to improve overall forest health.

Illegal logging brigades operate with impunity throughout the region, combing forests for the highest-quality timber and wastefully dragging out only the best and straightest sections, often as little as 10 to 12 feet out of a 60 foot tall tree. In Primorsky Province, the regional forest service estimated that

more than 2.5 million m3 of commercially valuable timber is discarded in logging sites, compared to total annual exports of just over 5 million m^{3,15} In some cases, these brigades operate independently, selling logs to small local sawmills. In others, these brigades are reportedly contracted by forest concession holders to harvest prime timber in excess of quotas, outside the boundaries of their concessions, within protective areas near their concessions (along riverbanks, or in special nut harvesting zones), or trees unauthorized for harvest.16 If these illegal brigades are caught by forest police, the large concession holders often deny any relation to these groups.

Logging brigades drag these illegally cut logs by tractor to nearby village sawmills, which provide falsified harvest permits stamped by local authorities. Sawmill owners or their agents print off documents themselves, often downloaded from the internet, and take them to a local official to get stamped for a bribe of around \$3-6 per m³.7 Chinese sawmill owners demonstrated a very clear understanding of the illegal nature of timber sourced from these logging brigades: "It is illegal to buy wood from the Russians... as long as you are not caught on the spot, you just call it your own wood." 18

ENTER THE DRAGON --CHINESE BUSINESSMEN IN RUSSIA

Over the past 20 years, Chinese businessmen have become major players at all levels in the forestry sector in Eastern Russia. This process accelerated following the 2007 decision by the Russian government to increase export tariffs on roundwood log exports in an effort to increase domestic processing of timber resources. The majority of the new sawmills that have sprung up across Eastern Russia in the past five years are Chinese-owned, and they operate primarily with Chinese immigrant labor.19 As foreigners face heavy restrictions from owning businesses in Russia. Chinese timber traders, forest concession-holders. and sawmill owners employ well-connected local Russians to act as their local proxies. These Russian partners generally have some combination of experience in the local timber sector, strong connections to local officials, and sometimes even relatives in local or regional government. These actors and their Russian partners regularly flout Russian forestry regulations through bribery and the use of falsified official documents.

Expansive Chinese investment in Eastern Russia is carried out by a variety of actors, including large Chinese state-owned enterprises and privately held wood product companies that own hundreds of thousands of hectares of forest concessions and dozens of sawmills. small and large trading companies, as well as small family-run sawmills operating in remote Russian forest villages. However, even these small operations are coordinated under networks run by a handful of powerful Chinese operators, with decades of experience in Russia, as well as both official and unofficial connections to the government. These powerful operators function in a structure of organized criminal activities with ties to both Russian and Chinese officials and are often involved in a variety of illegal activities.

In 2009, facing international scrutiny regarding overseas investments in natural resource production, the Chinese government outlined voluntary guidelines for Chinese companies active in the harvesting, processing and export of forest products in foreign countries. These guidelines specify that Chinese operators should abide by all relevant



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domestic laws and sustainable harvesting practices.²⁰ On paper, the Guide serves as a useful foundation for Chinese companies to establish mutually beneficial, long-term relationships with host countries. However, the actions of many Chinese companies involved in the Russian forest sector show a complete disregard for these guidelines, and underline the weakness of such voluntary measures in impacting industries driven by profit margins (See "Part 4: Enter the Dragon," p. 38).

MANUFACTURING IN CHINA

The vast majority of Russian oak enters China at Suifenhe, a small northeastern city on the border of Primorsky Province. Suifenhe has grown rapidly over the past 15 years from a sleepy border outpost to a bustling city. Hundreds of trading companies have taken root in the hills and valleys of the city, the largest of which operate their own rail spurs to directly import, process, and distribute timber. Many of these enterprises operate sawmills to transform logs into sawn timber, but there are few factories for production of finished goods.

From Suifenhe, Limber is sent onwards into China by rail or road, either directly

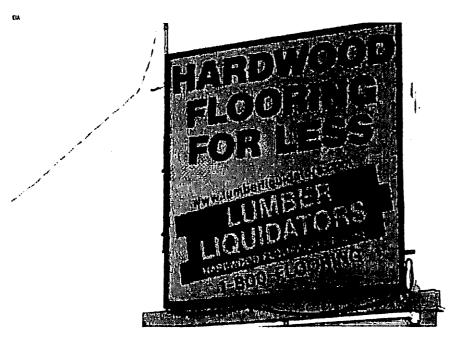
to manufacturers or to wholesale markets throughout the country. At all stages in this process, hardwoods from Russia are mixed with those harvested in China's northeastern forests or with timber imported from the United States or the European Union. Precious hardwoods, such as oak, ash, elm, and linden are most commonly used in manufacturing of furniture and flooring for both the Chinese domestic and export markets. Most of the furniture and flooring produced in northeastern China is exported through the port of Dalian, although Russian hardwoods and softwoods end up in products manufactured throughout China. In total, Chinese manufacturers exported neary \$20 billion worth of hardwood furniture and flooring in 2012. The United States (33%). the European Union (17%), and Japan (7%) are the largest markets.21 China has quickly become the dominant import partner for the United States, comprising 55% of total imports in 2009.22

Most Chinese exporters interviewed by EIA investigators reported that they could declare this mixed wood as originating in whichever country the buyer indicates is most desirable. This practice serves to obfuscate already

complex supply chains, and is in direct violation of declaration requirements under the U.S. Lacey Act, which requires importers to accurately declare species and country of harvest (See "Part 5: Chinese Manufacturing and Export," p. 42).

Timber sourced from Eastern Russia, in particular precious hardwoods such as oak, ash, elm, and linden should be considered extremely highrisk for international buyers concerned about the legality and sustainability of their wood product purchases.





CONCLUSION

Despite decades of international awareness and the efforts of courageous forest rangers and locals committed to protecting their forests. illegal logging remains the status quo in the RFE. Timber sourced from Eastern Russia, in particular precious hardwoods such as oak. ash, elm and linden should continue to be considered extremely high-risk for international buvers concerned about the legality and sustainability of their wood product purchases. Buyers purchasing furniture, flooring and other products sourced from China containing these species must work with their Chinese suppliers to gain clear knowledge of their supply chains back to the origin of the timber and with lawabiding Russian timber companies that can rigorously demonstrate legal sourcing.

The pervasive nature of illegal logging throughout the forest sector in Eastern Russia underlines the need for destination countries to implement and enforce legislation to prohibit trade in illegally-sourced wood and wood products. As the largest purchaser of timber from Eastern Russia, China must enact a clear prohibition on illegal timber imports destined for both subsequent export and domestic end use. The United States and the European Union have both enacted prohibitions in illegal timber imports yet remain major markets for products made from illegally sourced Russian oak. Enforcement officials in these countries must

ensure that companies are following the law and must investigate possible violations aggressively.

In addition to a Chinese prohibition on illegal timber, authorities from importing countries must work together with the Chinese government to enable transparent tracking of wood products throughout the Chinese manufacturing system in order to allow clear accounting for country of harvest. Japan — the largest purchaser of manufactured wood products from China that has yet to enact a mandatory prohibition on illegally-sourced

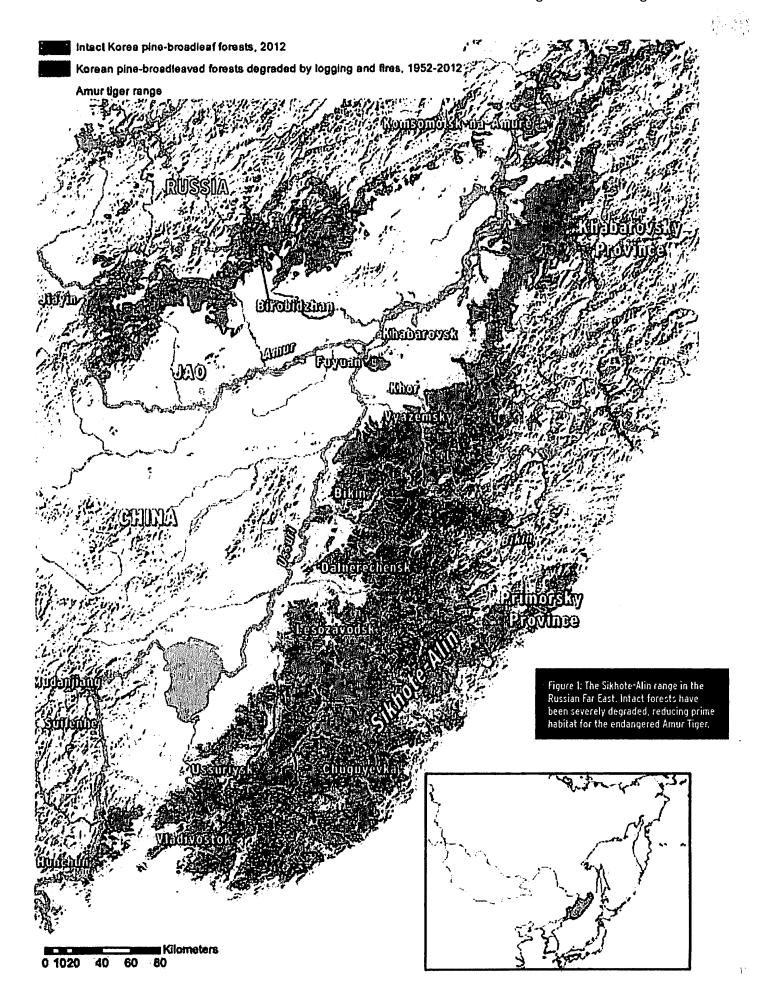
Today's forest sector operates for the short-term enrichment of a select few individuals, at the expense of the future of the Russian people, industry, and their environment.

imports – bears a particular responsibility to act. All of these destination countries should work together and with Russia to better coordinate and implement border enforcement measures and to ensure transparent tracking of legal wood products.

In the past year there have been encouraging signs of increased official attention to the illegal logging crisis in Eastern Russia. President Putin has made a number of strong public statements criticizing the insufficient efforts by law enforcement agencies and has ordered the Attorney General to take prosecution of illegal logging under his personal control. A number of serious cases have been opened targeting organized criminal networks of illegal loggers. Such promising efforts to limit the supply of illegally logged timber in Eastern Russia must be complemented by efforts by importer countries to limit the demand for illegal timber in their markets.

Forest management in Eastern Russia is in need of comprehensive reform. The Russian government should undertake a systematic reassessment of actual timber stocks in those regions most affected by illegal logging, in order to set permitted logging volumes at sustainable levels. The Russian government should enact proposed reforms that would improve the documentation of roundwood harvest, transport and sale, and should facilitate legality auditing for importers. Funding for forest law enforcement needs to be increased to at least previous Soviet-era levels in recognition of the high economic and ecological value of these rich forested lands.

However, all domestic measures to improve governance in the Russian forest sector are unlikely to be successful if major importers in the U.S. and other consuming countries continue to purchase products from manufacturers in China that are clearly dealing in illegal wood. Lumber Liquidators provides the most stunning example of an importer cutting corners by buying millions of square feet of solid oak flooring from a manufacturer that at every level engages in illegal practices and many of whose suppliers are under scrutiny by Russian authorities for illegal logging in the most threatened temperate forest in the world. Without swift action by consumer country governments and consumers, the final consumer will remain the source of the wealth that fuels the malias currently raiding Russia's forests.





EIA has continued to track the issue of illegal logging in the Russian Far East (RFE) since its first investigation in 2007.²⁵ In the face of continued reports of extremely high levels of illegal forest degradation, EIA returned to the field in 2011 to systematically investigate the nature of the crimes in the RFE forest. Over the next two years, EIA was able to determine the path of the illegal timber and wood products throughout the global supply chain.

Despite the pressure and dangers involved, many individuals in the RFE, including foresters, local nonprofit organizations, police officers, game wardens, and individual citizens, work at high personal risk to expose the illegal logging trade. Based on communication with these partners, EIA investigators were able to highlight the loggers, sawmills, and traders operating in Russia that were associated with the highest risk of illegality. These included companies currently under investigation or previously cited for illegal logging by the Russian police, as well as traders that buy logs from regions where illegal loggers are particularly active.

EIA investigators concurrently analyzed customs data to determine the largest players in the export of precious hardwoods from the RFE into China, the US, the EU, and Japan. These data sets from Russia, China and the United States provide detailed information about species, quantities, exporters, and importers involved in the trade of wood products. Over the last ten years, China has emerged as the single largest recipient of Russian hardwoods.²⁴

By cross-referencing these sets of data, EIA was able to develop a list of the Chinese

manufacturers that imported large amounts of logs or sawn timber from high-risk exporters in Russia. EIA then established a cover company and contacted these Chinese companies as potential buyers of wood flooring products from the United States. EIA investigators visited ten of these companies in person in China, and in some cases in mills controlled by these Chinese companies in Russia. In these conversations, EIA asked about their knowledge of illegal logging in Russia, their own exposure to that illegal logging, and how they interacted with their customers, particularly customers from the U.S.²²

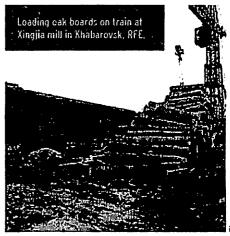
One Chinese company named Xingjia quickly revealed itself to be the dominant player in the cross-border trade of valuable Russian hardwoods, both in terms of volume and risk of illegality. Discussions with Xingjia management²⁶ and analysis of trade data sets revealed their biggest customer to be the U.S. flooring giant Lumber Liquidators.²⁷

LUMBER LIQUIDATORS AND XINGJIA: A CLOSE RELATIONSHIP

Lumber Liquidators is the largest specialty retailer of hardwood flooring in the U.S. and owns over 300 retail stores in North America. The company has earned record profits in recent years.²⁰

Lumber Liquidators' primary supplier for this flooring²⁰ is a Chinese company called Suifenhe Xingjia Economic and Trade Company (Xingjia).³⁰ According to Xingjia officials, Xingjia owns and operates four forest concessions in Khabarovsky Province in the RFE. In conversations with EIA undercover investigators posing as potential buyers, Xingjia officials described their practices of illegally cutting outside of their concession boundaries, overcutting within those boundaries, and purchasing over 90% of their stocks from trading companies throughout the RFE who provide no documentation for proof of origin or evidence of legality of the wood that Xingjia buys.

EIA subsequently investigated companies identified as Xingjia's top suppliers, and found that many had links to recent illegal logging cases. In fact, Xingjia suppliers are under investigation in the two largest cases of organized illegal logging uncovered in Khabarovsky Province in the past three years. One supplier that Xingjia explicitly named when asked for documentation about their sourcing was sanctioned in 2010 for illegal logging and is the subject of a pending criminal investigation for illegal logging in the RFE.



Xingjia officials further explained to EIA that their illegal operations are possible due to their high-level political connections with both Russian and Chinese officials. On multiple occasions, Xingjia officials stated that in order to conduct illegal logging operations in Russia they had to make payments to officials to avoid scrutiny from law enforcement. One Xingjia official said, "Chinese [buyers] in Russia are reaching into every corner - its politics, from Russia's high ranking officials to locals, are all bought (by the Chinese)."³¹

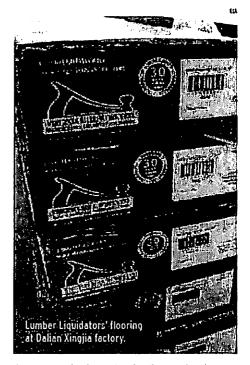
Over the past five years, Lumber Liquidators has continued to expand its relationship with Xingjia, including visiting Xingjia's mills in the RFE in the spring of 2012. In late 2011, Lumber Liquidators acquired a Shanghai-based trading company, Sequoia Flooring, that provides quality control, product control, and logistics for Lumber Liquidators. According to Lumber Liquidators' CEO, the company established direct control over sourcing from China in order to "better control product cost and quality." 33

One of Lumber Liquidators' many imported product lines contains hand-scraped solid oak and birch hardwood flooring under the Virginia Mill Works Co. brand name. U.S. customs records indicate this flooring is imported from a handful of Chinese manufacturers. From the end of 2012

into 2013, Lumber Liquidators has made Xingja its chief Chinese supplier of hand-scraped solid oak flooring.³⁴

Over the past three decades. Lumber Liquidators' Chinese partner Xingiia has expanded from a small-town distributor to become a global exporter and one of the largest Chinese players in the precious hardwoods trade in the RFE. According to a Xingiia official, the company operates three factories in northeastern China, as well as fourteen sawmills in the RFE province of Khabarovsk (See Figure 2, p. 13). Russian customs records show that Xingjia exports 82,000 m³ round wood equivalent (RWE) of precious hardwoods per year under its own name; Xingjia's president claims that the actual figure is closer to 400,000 m³, including exports to other Chinese companies.

Xingjia officials told EIA undercover investigators that Lumber Liquidators' head of sourcing operations visited Xingjia's offices and sawmills in the RFE in May 2012, to ensure that Xingjia's oak "supply was secure for a long time," since "they [Lumber Liquidators] think that the quality of oak from Europe, from Germany and France, is very low." Since the time of this visit, U.S. import records indicate that Lumber Liquidators increased the

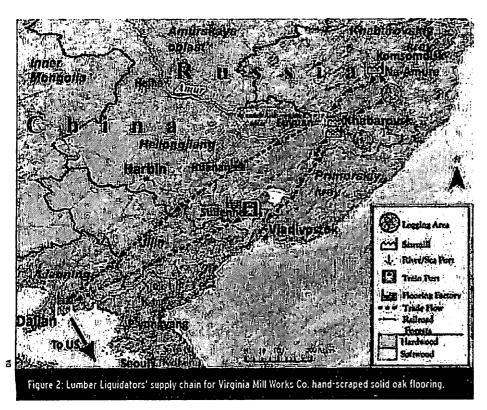


frequency of shipments of solid oak flooring from Xingjia. There were at least 30 shipments between May 2012 and August 2013 (See "Manufacturing in China: Dalian Xingjia and Huanan Hexin," p. 19).**

"CLEARING PIPELINES WITH THE GOVERNMENT"

In meetings with undercover EIA investigators. Xingjia's president, Mr. Sun, and his brotherin-law, Mr. Yu, explained how the family has managed to succeed in the hostile business environment of the RFE timber sector. As foreigners face restrictions to business ownership in Russia, Mr. Sun and Mr. Yu stated that the most important factor to success is having close Russian allies. Mr. Yu stated that their biggest supplier is the son of the deputy governor of Khabarovsky Province, and that their nominal head of exports was the brother of the attorney general for the Far East Region. Mr. Sun said that he regularly hosts Chinese officials from the central government and Heilongijang Province, as well as numerous mayors, and that he hosts and finances every Chinese New Year celebration at the Chinese consulate in Khabarovsk.37

In meetings in his Khabarovsk office, Mr. Sun described the various ways that they have learned to operate profitably in the RFE.



SUPPLIERS TO XINGJIA

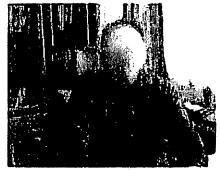
SUPPLIER NAME	SUPPLIER LOCATION	EXPORTER NAME	EXPORTER TOTAL LISTED VOLUME IN 2012 (M³)
Beryozoviy LLC	Nanaisky County	Pik LLC	19,309 m³
Investstroy LLC	Vyazemsky County	Alpha DV LLC	20,533 m³
JSC istok	Lazo County	JSC Istok	1,969 m³
Chuyin LLC	Lazo County	Chuyin LLC	24,402 m³
Gornie Kluchiy LLC	Lazo County	Pik LLC	19,309 m³
Khorskoe RU	Lazo County	No known Xingjia exp	oorts in 2012
Azia·Lesprom LLC	Lazo County	No known Xingjia exp	ports in 2012

Table 1: Xingjia suppliers and associated companies listed in this report.

In addition to Xingjia's annual allowed hardwood quota of 30-40,000 m³, they work with officials in order to cut more, "in terms of over cut, you will have to coordinate with the government, through some special ways."³⁸

On their own concessions, Xingjia's annual hardwood logging quota includes both high-quality timber and low-grade firewood. Xingjia officials explained that they do not report the volume of low-grade wood they actually harvest, and use the unreported volume to "cover" high-value wood logged illegally on concessions owned by other companies. "You need to cut down these trees, pile them into piles, and covertly move them out, and then you go to others' [concession] to cut good wood, to substitute with." 39

Mr. Sun's office is located within a veneer factory, which Xingjia purchased from a Japanese company called Ikeuchi. Mr. Sun explained that Xingjia was able to succeed where Ikeuchi did not, because "unlike Chinese companies, which operate both properly by the law, and improperly by the law, the Japanese wanted to do it all properly. Their way is hard to sustain. For example, we work to 'clear pipelines with the government', they did not, and thus they could not survive."40 According to other Xingjia officials, Ikeuchi remains the primary customer for this very same linden veneer; Xingiia sells these veneer sheets directly to a plywood factory in Dalian owned by Ikeuchi.



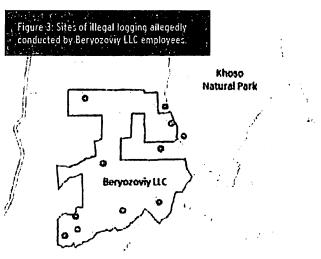
兴佳集团蓬耶长: 孙佳

Xingjia president Mr. Sun, manager of Russian operations.

XINGJIA'S HARDWOOD SUPPLIES: OBSCURE AND ILLEGAL ORIGINS

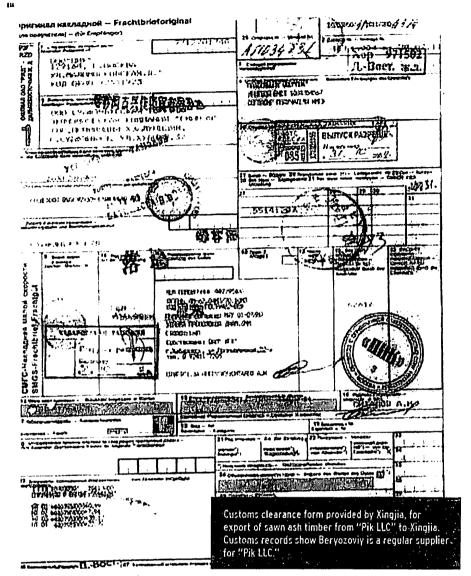
The company's president, Mr. Sun, coordinates a reported 14 sawmills across the southern Khabarovsk region from his Khabarovsk office. These sawmills purchase logs from a variety of sources throughout the region. According to Mr. Sun, about 10% of their hardwoods, totaling 30,000-40,000 m³, comes from what Xingjia refers to as its own forests, while the remainder of their total annual exports of 400,000 m3 is purchased from a variety of Russian trading companies, based mostly in Khabarovsky but also in Primorsky Province.4 A variety of local sources cite a shadowy Chinese individual known in Russia as "Dima Ogurets" ("Dima the Pickle") as the main buyer of logs for Xingjia in Khabarovsky Province.42





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It is common knowledge in the industry that trading companies in the RFE play the key role in laundering illegal timber by obscuring the source of harvest and by falsifying documentation. ELA identified the names of around 30 trading companies and concession holders that sold timber to Xingjia in 2012. Official documents, publicly-available trade data, and simple Internet searches reveal a plethora of specific evidence of illegal harvesting among these companies.

BERYOZOVIY LLC

In response to EIA's request for documents that verify the origin of the timber Xingjia was selling, Xingjia provided undercover EIA

investigators with copies of permits for a concession belonging to a company called "Beryozoviy LLC," located in Nanaisky County, near the city of Komsomolsk-na-Amure in Khabarovsky Province. Khabarovsk law enforcement officials recently opened a criminal case related to illegal logging against the General Director of Beryozoviy and 33 other defendants under Article 210 of the Russian Criminal Code, for "Organization of a Criminal Group."

The case was opened on the basis of sixteen separate instances of illegal logging detected on or adjacent to Beryozoviy's 31,000-hectare (Ha) timber concession in the period from 2009 to January 2012. According to online news

articles based on official government press releases, more than 1,500 m3 of oak, ash, and linden timber were stolen, which Russian forest authorities estimate resulted in 65 million rubles (approximately USD \$2 million) of associated damage to the economy and the environment. Law enforcement officials first suspected that this timber theft was carried out by workers of Bervozoviv based on the regular presence of the firm's logging equipment within close proximity of the illegal logging sites. The volumes involved (up to 503 m³ on a single site) make it highly unlikely that "intruders" could have snuck onto the small forest concession (where the firm's own logging brigade was regularly working) to steal limber for days or weeks at a time. In one instance, the loggers strayed out of the forest lease and stole 327 m3 of valuable hardwoods from within the Khoso Natural Park. a protected area that contains the northernmost breeding grounds of the endangered Amur tiger, in Khabarovsky Province (See Figure 1, p. 11). Al the time of publishing, the case has not been concluded and the investigation into criminal violations is ongoing.46

During a previous visit, Xingjia officials provided EIA investigators with additional documents that demonstrate a strong link to Beryozoviy. One of these documents, a customs clearance form for a 2011 shipment of sawn ash lumber, listed the name of a Moscow-based trading company called "Pik LLC" as the sender, and Suifenhe Xingjia as the recipient.⁴⁷ According to Russian customs data, in 2011 the trading company "Pik LLC" exported more than 500 m³ of oak and ash logs from Beryozoviy to Xingjia during a period when the greater part of illegal logging was allegedly committed by Beryozoviy.⁶⁰

The investigation by Russian law enforcement officials also reveals a close connection between Xingjia and Beryozoviy. In one instance, Russian law enforcement officials were able to identify the log yards to which illegal timber was trucked. One yard is located on Tselinnaya Street, a short street in an industrial suburb of Khabarovsk. During a visit in 2012, EIA undercover investigators were escorted by Xingjia officials to the largest of the sawmills, at number 8b Tselinnaya Street. The second yard identified by law enforcement officials was located in "Station P. in the Jewish Autonomous Province." The only train station beginning with the letter P in that province is Priamursky, a

port town on the Amur River that is the closest export point to the Chinese city Fuyuan.49 As described below, Xingjia is currently expanding its existing log import yard in Fuyuan's river port (See "Cross-border Timber Theft; Suifenhe Xingjia," p. 18).

INVESTSTROY LLC

Customs records on and statements by Mr. Sun confirm that the prime source regions for Xingjia's timber are Lazo and Vyazimsky counties in southern Khabarovsky Province.™ These counties include the richest Korean pine-broadleaf forests in the province and experience the highest rates of illegal logging, according to local officials and environmental groups.⁵² In the period between 2008-2010, illegal logging in Lazo County accounted for 48% of the total damages resulting from illegal logging across the entire province.53

In 2012, provincial forest rangers registered two illegal logging sites on the territory of the timber concession held by Investstroy LLC in Vyazemsky County, detailed in online news articles. Two kilometers from the illegal logging site, they found the camp of Investstroy's logging crew with all its equipment. Loggers from the crew claimed that they were not associated with the violation in question. and were in the woods awaiting documents permitting them to conduct harvest on

authorized logging sites. On the road to the authorized site, rangers observed yet another illegal logging site. In total, nearly 300 m3 of valuable oak and ash had been stolen.54

The discovery of these illegal sites prompted a yearlong investigation, in which 10 cases of illegal logging by the company were registered by forest rangers and police. The investigators determined that members of Investstroy's logging crew had illegally selected highly valuable and healthy trees for harvest under the guise of "sanitary logging," in which old or diseased trees are cut to improve overall forest health. In the end police estimated that total damages could reach 90 million rubles (USD \$3 million).55

During their investigation of Investstroy. officers and forest rangers determined that the company had recently transferred a large load of oak and ash timber to a log yard in the nearby town of Vyazemsky. By comparing stumps and discarded tree tops on the logging sites and the stubs of logs in the yard, forest experts found twenty matches between stumps and logs, thus confirming that the stockpiled wood had come from these sites. Police obtained a contract from the log yard owner showing that logs from Investstroy were being stored there for the Khabarovsk-based trading company Alpha-DV LLC. In this contract Investstroy committed to supplying Alpha-DV

with 1000 m3 of oak sawn logs and 1000 m3 of ash sawn logs in the course of 2012.56 Russian customs records show that Alpha-DV exported 20,533 m³ of oak, ash, linden, and birch logs and lumber to Xingjia in 2012.57

ILLEGAL LOGGING ON SUPPLIERS' CONCESSIONS: JSC ISTOK, CHUYIN LLC, GORNIE KLUCHIY LLC

A widely known practice for concession holders in the RFE is to hire independent logging brigades to cut illegally on their own concessions.50 In this way, the concession holders are able to avoid prosecution if the brigades are caught breaking basic logging rules which are critical to protecting tiger habitat and general sustainability. In many cases, forestry officials have caught illegal logging brigades operating in very close proximity to legal logging sites, and with machinery belonging to the actual concession holder; in the latter case, concession holders often claim the equipment was stolen.59

In many cases, this is highly implausible. During a meeting with undercover EIA investigators, Xingjia's president, Mr. Sun, stated that Russian concession holders generally have guards on patrol to protect their concessions.60

In 2011, Russian forest law enforcement officials filed illegal logging violations involving more than 1,500 m3 of illegally harvested timber on the territories of three concession holders in Lazo County: JSC Istok, Chuyin LLC and Gornie Kluchiy LLC (See Table 2 below). Each of these companies is listed in Russian customs data as a supplier for Xingjia.

VOLUMES OF ILLEGAL LOGGING

RUSSIAN FOREST LEASEHOLDER	VOLUME STOLEN FROM FOREST LEASE IN 2011
JSC Istok	463.9 m³
Chuyin LLC	964 m³
Gornie Kluchiy LLC	136 m³

Table 2: Volumes of illegal logging registered by provincial forest rangers in 2011 on the forest concessions of three Russian firms supplying Xingjia.



KHORSKOE RU AND AZIA-LESPROM LLC

Documents obtained by EIA⁶² show the results of an official four-day joint field investigation by Russian forest rangers, law enforcement officials, and NGO specialists of two timber concessions in Lazo County, owned by Azia-Lesprom LLC (31,884 ha) and Khorskoe RU (25,532 ha) in 2012. These two small concession holders are characteristic of southern Khabarovsky Province, and provide insight into the extensive and overt nature of illegal logging operations in this area, where Xingjia claims to source most of its timber.

When questioned about their involvement in the nearby logging, the firm's supervisor claimed that the men were merely on a fishing trip, despite the presence of significant logging equipment.

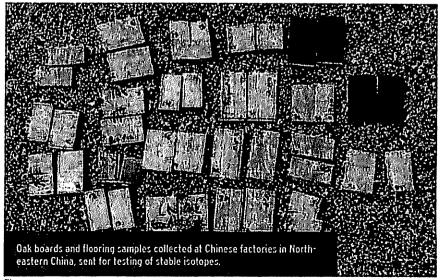
The official joint investigation revealed that Khorskoe RU had not begun logging on any of the sites where it had received governmental authorization, but that instead two major illegal logging operations had occurred in forests with higher quality timber in close proximity to the undeveloped logging sites. When questioned by forestry experts, the driver of a log truck originating from one of these illegal sites stated that he worked for Khorskoe RU (a claim that was later denied to the joint investigative team by the firm's logging supervisor), and provided documentation from one of Khorskoe RU's authorized logging sites as proof of origin. The other site was located at the end of a deadend road running straight through Khorskoe RU's logging camp, making it highly unlikely that any logging crews and log trucks could have passed unnoticed by the firm during weeks of illegal cutting. Furthermore, official records documented similar large-scale illegal logging on Khorskoe RU's timber concession

Innovative Technologies: Stable Isotope Wood Tracking Methods

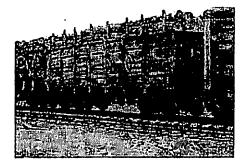
Recent scientific and technical advances mean that innovative technologies are now available as realistic and cost-effective tools to allow companies, governments and consumers to trace the origins of their wood product purchases. Stable isotopes provide new possibilities to help companies and governments trace wood products back to their original country, and even specific forests, of harvest. The forensic use of this technology is well established in food safety, counterfeiting, and drug trafficking, and its use in timber tracking has recently been profiled in reports by WWF Germany.

Environmental factors such as soil, groundwater and rainfall determine the chemical make-up of the nutrients consumed by a tree over its lifetime. These chemical signatures consist of trace elements, rare substances present in minute quantities and stable isotopes - versions of common elements such as oxygen, hydrogen, sulfur and nitrogen, molecular structures of which contain differing numbers of neutrons. For example, every organism that was once alive, from apples to strands of hair to a piece of wooden flooring, contains a particular balance of oxygen molecules with 18 protons and neutrons (heavy) to oxygen molecules with 16 protons and neutrons (light), written as 0²⁶/0⁴⁶. Stable isotopes remain in wood even after a tree is felled, and can serve as a reliable record of geographical origin.

During visits to Chinese manufacturers, EIA was given samples of boards and manufactured flooring by six companies exporting to the U.S. and EU. Eleven of these samples were provided by representatives from both the Suifenhe and Dalian facilities of Xingjia, the key supplier to Lumber Liquidators. Five of these eleven samples were cut from a batch of flooring which EIA observed Xingjia workers preparing for shipment to Lumber Liquidators. EIA sent these samples to a respected laboratory with decades of expertise in stable isotopic analysis for testing. Preliminary results from stable isotopic analysis indicated that every sample provided was Russian in origin. For 18 out of 20 of these samples, the analysis gave a confidence level of 95% or greater. These results indicate that all of the samples received from Xingjia were likely sourced from the forests of Khabarovsk Province – the forests where the company claimed to be sourcing, and where their suppliers have previously been convicted of, and are currently suspected of, illegal logging.



Xingjia leases a private rail spur in Suifenhe, in order to directly receive imports of Russian timber.



in 2011, where high-grade ash, linden, and oak logs were extracted throughout an entire river basin without any permit.

The joint field investigation also found that while Azia-Lesprom logged only 20% of its annually authorized sites, the company's records showed that the full authorized volume of valuable hardwoods had already been extracted from the forest. No explanation was offered to detail where the full volume had come from, but forest rangers noted the proliferation of illegal logging sites on the company's territory, with more than 2000 m³ of stolen timber being registered.

Firms steal high quality timber from public forestlands while paying insignificant stumpage fees for lower quality logs they will not harvest.

In another area of Azia-Lesprom's concession not permitted for harvesting, the joint field investigation encountered an illegal logging site where significant volumes of hardwood logs had very recently been cut. Tracks on the dirt road suggested that the logging crew had recently left the illegal harvesting site. (Illegal loggers often make use of scouts to alert them to raids.) Several kilometers from the site, the team found Azia-Lesprom's logging crew,



along with tractors, logging equipment and portable living quarters. When questioned about their involvement in the nearby logging, the firm's supervisor claimed that the men were merely on a fishing trip, despite the presence of significant logging equipment. In another location on the Azia-Lesprom's concession, the team discovered another illegal logging site involving hundreds of cubic meters of stolen timber in very close proximity to an actual permitted logging site, from which no timber had been cut.

These examples illustrate the illegal logging methods common across southern Khabarovsky Province, the region where Xingjia claims to be the dominant hardwood log buyer. They make clear what is commonly known in the area: authorizing documents from registered concession holders are not proof that companies like Khorskoe RU or Azia-Lesprom are working within the law, but instead provide a thin veneer of legality for large-scale timber theft. Firms steal high quality timber from public forestlands while paying insignificant stumpage fees for lower-quality logs they will not harvest. They deplete timber stocks exponentially faster than official statistics show or than forest management authorities approve. In fact, the high-grade forests being stolen in these cases were usually intended to be left undisturbed as riparian buffers or key forest habitats.

CROSS-BORDER TIMBER THEFT: SUIFENHE XINGJIA

Russian customs documents show that 74% of Xingjia's registered imports from Russia passed through the Suifenhe border crossing in 2012.⁴⁴ EIA undercover investigators visited Xingjia's operations in Suifenhe in late 2011. For an entire day, Xingjia representatives led investigators around their downtown office and two sawmills and lumber yards. Xingjia representatives took investigators to what they called their private rail spur, which permits them to directly receive and process Russian timber imports, "This is rail number 35...this is actually our private rail spur. [Wood imports] will come here, and then we will sell some of them."⁶⁵

In Suifenhe Xingjia processes log and sawn wood imports for distribution to Xingiia's factories throughout China and for sale to other Chinese manufacturers.⁶⁶ As in Khabarovsk, Xingjia has also nurtured close connections to the political elite in Suifenhe. To demonstrate these connections, a Xingija representative took EIA undercover investigators to a dinner at the restaurant that the Xingjia representative said was owned by the town's Customs Bureau. They were accompanied by three local officials whom the Xingjia representative identified as high officials in the army and local court. The representative made it clear that if EIA's cover company wanted to work with them, then Xingjia would help them to resolve any legal problems that arose.67

During this visit Xingjia officials told EIA investigators that Xingjia has received a 200 million yuan (USD \$33 million) loan from the Chinese central government to develop a port on the Chinese side of the Amur river, 60 km west of Khabarovsk: "They gave us 200 million. Fuyuan does not have that much money. It is from the central government, to foster enterprises." This port would serve as Xingjia's

own personal distribution center, bypassing the border crossing at Sulfenhe and avoiding checkpoints along the Russian rail network. An article from October 2012 on a national Chinese news website notes that the port was already in operation at that time, and that on the day of the reporter's visit the port received 3,000 m³ logs from Komsomolsk, the area where Xingjia's supplier Beryozoviy operates (See "Beryozoviy LLC," p. 15).69 The article notes that Xingjia hopes the port will soon permit Xingjia to export finished products downriver, directly to major Japanese and Chinese ports.

MANUFACTURING IN CHINA: DALIAN XINGJIA AND HUANAN HEXIN

Xingjia operates two factories in northeastern China for manufacturing hardwood flooring. Huanan Hexin, with an annual output of 700,000

Figure 4: Label on a box of Lumber Liquidators' Virginia Mill Works handscraped solid oak flooring, photographed at Dalian Xingjia in late 2011.

m² of hardwood flooring per year is located north of Suifenhe, near the last remaining commercially-productive hardwood forests in China. Dalian Xingjia, run by Mr. Yu, brotherin-law of Xingjia's president Mr. Sun, is located an hour and a half northeast of the port city of Dalian and has an annual output of 800,000 m² of hardwood flooring. Both factories produce solid hardwood flooring of oak and birch for both domestic and international markets.

International exports from both factories depart from the port of Dalian. Mr. Yu told undercover investigators that Dalian Xingjia ships about 800,000 m² of flooring each year; 500,000 m² is sent to the United States and Canada, and 300,000 m² to the EU. According to Mr. Yu, Lumber Liquidators is Xingjia's largest customer, receiving around 10-15 20-foot shipping containers monthly – a statement corroborated by U.S. import records. Mr. Yu reported that other major customers included COSTCO Canada, and previously B&Q in the UK. Xingjia's website states that





the company also exports flooring under the "Green Leaf" brand name to the U.S., UK, France, Republic of Ireland, and Spain."

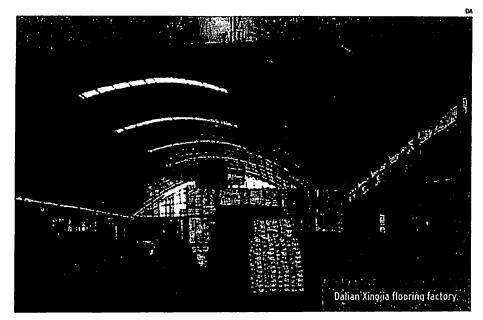
During the first visit to Dalian Xingjia in late 2011, EIA investigators observed stacks of pallets of Lumber Liquidators' Virginia Mill Works handscraped solid oak flooring outside the factory, ready for export. Inside the factory, the entire production line was hard at work to fill the remainder of this particular Lumber Liquidators purchase order. Mr. Yu told EIA investigators that the raw material for these shipments was a mix of oak from Russia and from China.⁷²

U.S. import records confirm large numbers of shipments from Xingjia to Lumber Liquidators' distribution center near the port of Norfolk, Virginia in the United States. Exact quantities are difficult to discern, as Lumber Liquidators has opted to remove its name from publicly-available U.S. import documentation, thus making independent scrutiny of the company challenging. However, analysis of publicly available U.S. import data allows a partial estimation of ongoing imports by Lumber Liquidators from China.

In U.S. import data, the "Commodity" field is a blank space that importers can fill in with a description of the shipment contents. Analysis of U.S. flooring imports indicates that Lumber Liquidators sometimes includes a detailed product description in this field. The text below gives an example for a particular shipment, which arrived in Norfolk, VA on November, 6, 2011:

SOLID WOOD FLOORING SEQUOIA PO:23315-XIN/
LUMB ER PO:450D013182 VMCM5 3/4"X4-3/4"
VIRGINIA MILLWORKS CAMBRIDGE 10011755 NAME
ACCOUNT: LUMBER LIQUIDATORS, SERVICES LLC
CY TO CY MSCU5654274 SOLID WOOD FLOORING
SEQUOIA PO:23316-XIN/LUMB ER PO:4500013183
VMCM5 3/4"X4-3/4" VIRGINIA M ILLWORKS
CAMBRIDGE 10011755 NAME ACCOUNT:LUMB
ER LIQUIDATORS, SERVICES LLC CY TO CY
SCZU3257740"

The Shipper, Consignee, and Notify Party fields for this shipment had been removed on publicly available versions of the data. However, this field indicates clearly the manufacturer (XIN = Xingjia), destination (Lumber Liquidators) and the product (Virginia Mill Works Cambridge hand-scraped solid oak flooring). The Purchase Order (PO) numbers for



this particular shipment match the numbers photographed on boxes at Xingjia's Dalian factory during a visit in late 2011 by undercover EIA investigators (See Figure 4, p. 19).²⁴

On a second visit to Dalian Xingjia in early 2012, EIA investigators again found the factory focused on production of the same line of flooring for Lumber Liquidators -Virginia Mill Works hand-scraped Cambridge solid oak flooring (See Figure 5, p. 19). Again, Mr. Yu told investigators that around half of the oak used in flooring for Lumber Liquidators came from Russia, the other half from China. This time, he showed investigators a new stamp that he said Lumber Liquidators had given him, which marks every flooring board with three letters "HEX" and with the date of manufacture. Mr. Yu explained that HEX stood for Huanan Hexin, Xingjia's other factory in northeastern China, but that the same stamp was used in both the Huanan Hexin and in the Dalian Xingjia factories.⁷⁵

Mr. Yu stated that since Lumber Liquidators' recent purchase of Sequoia, the U.S. company was taking a more direct role in supply chain management in China. He told investigators of past and upcoming visits by senior officials from Lumber Liquidators, including an upcoming visit of their sourcing director to the RFE (described in the "Lumber Liquidators and Xingjia: A Close Relationship" section above).
Mr. Yu explained that Lumber Liquidators

was streamlining their sourcing, by moving their production of this particular product, hand-scraped solid oak flooring, from multiple suppliers to Xingjia, which promised to ensure a steady supply of high-quality oak.⁷⁶

U.S. import data appears to confirm this statement. However, U.S. import data indicates that Lumber Liquidators has decreased the amount of identifying information in its shipments by removing the manufacturer name, thus making shipments more difficult for third parties to track. The import record for the shipment that EIA investigators observed during this visit, which arrived in Norfolk on May 18, 2012, illustrates this change:

SOLID WOOD FLOORING VM HS CAMBRIDGE OAK 3/4"X 4-3/4"OLD ARTICLE NUMBER-VMCM5,10011755 PO:45 00040263 CY TO CY MSCU5855896 SOLID WOOD FLOORING VM HS CAMBRIDGE OAK 3/4"X 4-3/4"OLD ARTICLE NUMBER-VMCM5,10011755 PO:45 00040264 CY TO CY TCLU4024436"

During 2011, when the "Commodity" field sometimes included the manufacturer's name, Lumber Liquidators received five product lines of Virginia Mill Works hand-scraped solid oak flooring (Cambridge, Coventry, Old World, Tuscany, and Windsor) from five separate manufacturers, identifiable in import data by their three-letter abbreviations; XIN (Dalian Xingjia), HEX (Huanan Hexin), GRH (Zhejiang Dadongwu Greenhome), BXW (unknown) and SGF (unknown). EIA investigators were unable to ascertain the identity of the last two companies,

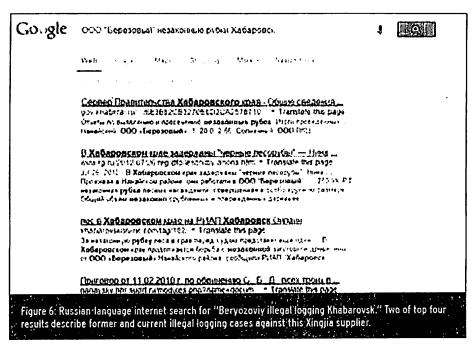
BXW and SGF, but both imported fewer than five shipments of solid oak flooring in 2011, and so appear to be minor suppliers compared to Dalian Xingjia, Huanan Hexin, and Zhejiang Dadongwu Greenhome.⁷⁶

Greenhome, a flooring company located near Shanghai, and a primary supplier of handscraped solid flooring to Lumber Liquidators in 2011, confirmed to undercover EIA investigators that Lumber Liquidators was shifting sourcing to a supplier in northeastern China. U.S. import data confirms that by September 2012, all import lines of solid oak flooring from Shanghai had ceased. Meanwhile, imports from Dalian had increased over this same period. Based on these shipments. and controlling for similarities in PO number sequences and other similar information as in the commodity fields listed above, EIA investigators estimate that Lumber Liquidators has received at least 35 separate shipments, containing nearly three million square feet, or about 70 football fields worth, of hand-scraped solid oak flooring from Xingiia in the period from May 2012 (the reported time of Lumber Liquidators' visit to the RFE) until August 2013.

LUMBER LIQUIDATORS AND THE LACEY ACT

Lumber Liquidators' website states: "The environmentally conscientious company only purchases from suppliers who practice sustainable harvesting, which allows forests to heal and re-grow faster." On a series

EIA investigators estimate that Lumber Liquidators has received at least 35 separate shipments, containing nearly three million square feet of hand-scraped solid oak flooring from Xingjia in the period from May 2012 until August 2013.



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PPQ 505 form provided by Lumber Liquidators' supplier Greenhome. Species is listed as "Quercus mongolica," a species existing only in northeastern China and the RFE, despite Country of Harvest listed as Germany.

of telephone and in-person conversations over a one-year period, Xingjia industry officials detailed Lumber Liquidators' efforts in consolidating their supply chain in order to bring down prices and secure a steady supply of hardwood timber. According to Xingjia officials, the director of procurement

from Lumber Liquidators' U.S. office and two representatives from the Shanghai office reportedly toured Xingjia's operations in Khabarovsk in early 2012, visiting sawmills and meeting with local officials. However, Mr. Yu, who accompanied these officials on their visit, reported to EIA investigators that

the Lumber Liquidators officials were not troubled by what they saw,⁸¹ and U.S. import records show that imports of solid oak flooring from Xingjia have continued since this visit.⁸²

In 2008, the United States amended the Lacey Act, a century old conservation law, to ban the import of illegally harvested wood products, thereby expanding the reach of one of the United States' most effective tools in combating environmental crime and associated trade to also address illegal logging.83 The Lacey Act is a fact-based, not document-based, law, Importers must evaluate their own supply chains and take reasonable and prudential measures to exclude illegally cut wood. The core principle of Lacey Act is referred to as "due care" and is an established legal principle in U.S. courts (See "Section 5: International Policy Context," p. 50). Conducting due care in sourcing decisions can take many forms - there is no one-sizefits-all approach. Different countries, products and importers will likely require tailored approaches to due care. However, there are certain common sense measures, including evaluating publicly available information, site visits, and independent verification of harvesting practices, which should form the basis of any due care approach.

Over the last several years, Lumber Liquidators has taken steps to vertically integrate its supply chain, evidenced by the purchase of the Shanghai-based Sequoia Flooring, which had previously provided the company with quality and product control services. Lumber Liquidators has also streamlined its sourcing practices, procuring increasingly significant quantities of its wood products from Xingjia, a company sourcing directly from known suppliers of illegal timber (See "Xingjia's Hardwood Supplies: Obscure and Illegal Origins," p. 14). Lumber Liquidators further conducted site visits to Xingjia.

If Lumber Liquidators had exercised due care, and asked appropriate questions, they would have learned of the known high risk of illegally sourced timber in the RFE and known illegal actions of Xingjia and its suppliers. In fact, a simple Russian-language Google search for Xingjia's suppliers, such as "Beryozoviy illegal logging Khabarovsk" or "Investstroy illegal

logging" brings up news articles describing recent illegal logging violations on the first page of results.

During site visits, communications with Xingjia management, and acquisition of Seguoia Flooring, Lumber Liquidators should have had multiple opportunities to ask further questions about the provenance of timber supplies and take prudential measures to exclude illegal timber from its supply chains. EIA investigations reveal how freely Xingjia officials discuss these matters and how easy it should have been for Lumber Liquidators to find out this information. However, despite Xingija's statements to EIA investigators that Lumber Liquidators' officials visited the same manufacturing plants in China and saw the same saw mills in the RFE that EIA's investigators visited, Lumber Liquidators continued to source timber despite the very high risk of illegality.

The Lacey Act also requires importers to provide a basic declaration to accompany every shipment of plants or plant products, including the country of harvest, species, value and quantity of each timber shipment in to the United States. The term "country of harvest" is distinct from the commonly used term "country of origin," in that country of origin refers only to the most proximate source of a traded product, while country of harvest means the place from which the plant was originally taken from its habitat. Solid wood flooring using Russian oak,

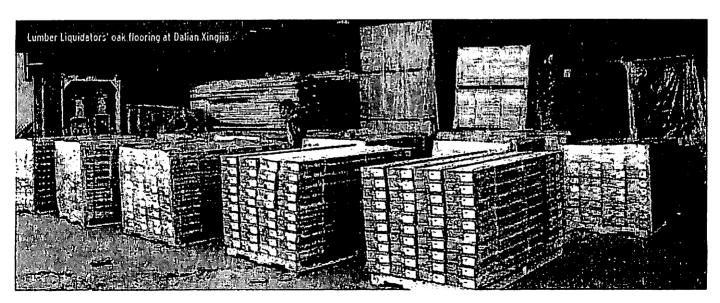
purchased by a U.S. importer from a Chinese manufacturer, would be declared as country of origin China, while the country of harvest would be Russia.

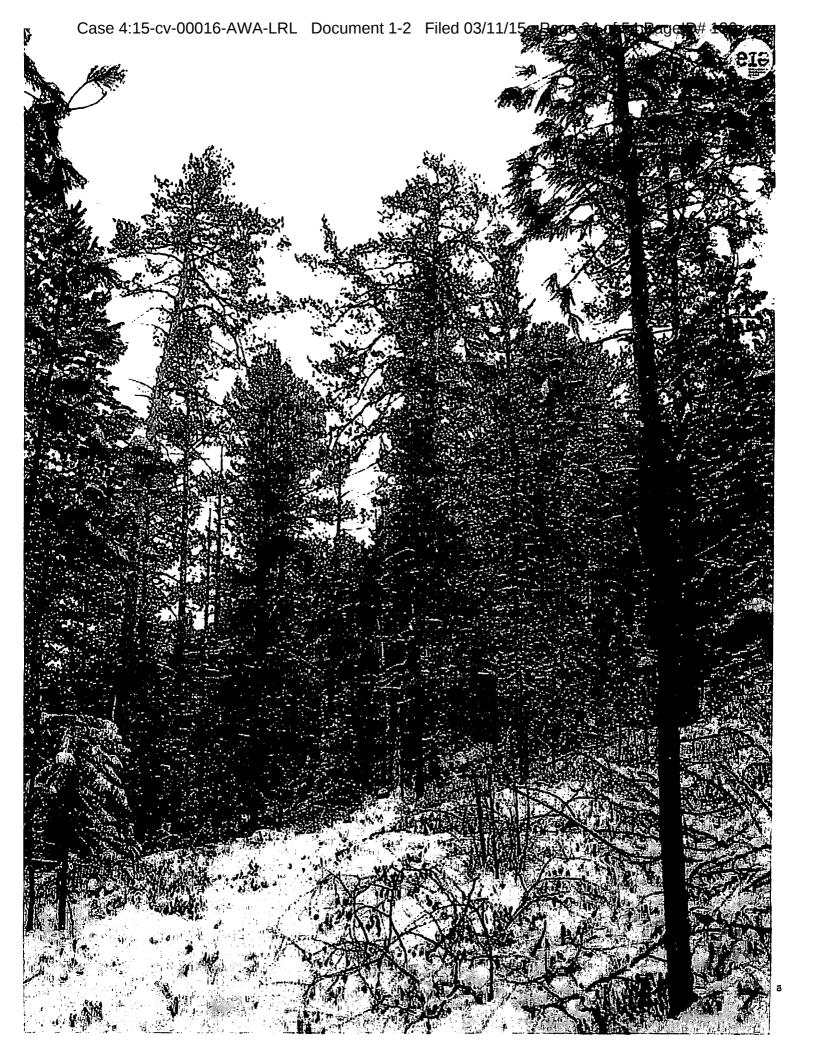
EIA was not able to evaluate whether Lumber Liquidators is currently declaring imports of Russian oak flooring from Xingjia as Chinese, Russian, or some other country of harvest. However, the case of another Lumber Liquidators supplier suggests an alarming trend. Dadongwu Greenhome, based in the flooring hub of Huzhou, was another primary supplier of solid oak hardwood flooring to Lumber Liquidators. During visits in 2011, Greenhome officials told undercover EIA investigators that they import oak logs from three German suppliers, though the officials noted that these German suppliers in turn source their wood from other regions in Eastern Europe as well as from a supplier in northeastern China.

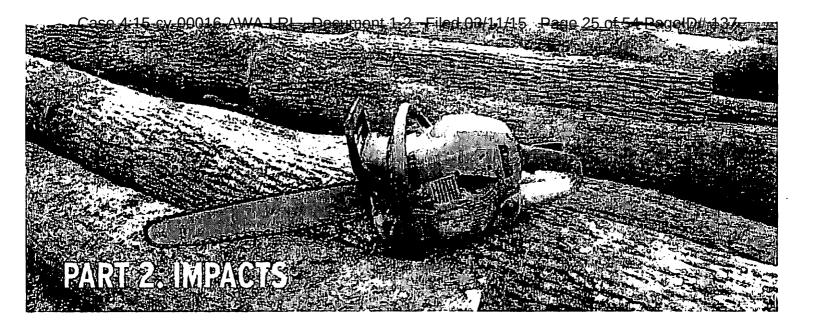
In later meetings with Xingjia in Suifenhe, a company official stated that they regularly supply oak lumber to Greenhome, and in fact, a truck being loaded while the EIA investigators were at the Xingjia's Suifenhe facility was destined for the Greenhome. Greenhome officials reported to EIA investigators that Lumber Liquidators is aware of their diverse sourcing, but that on the declaration forms required under the U.S. Lacey Act, Lumber Liquidators declares all shipments from Greenhome as German, because the "U.S. market

Greenhome officials reported to EIA investigators that Lumber Liquidators is aware of their diverse sourcing, but that on the declaration forms required under the U.S. Lacey Act, Lumber Liquidators declares all shipments from Greenhome as German, because the "U.S. market and government don't like [wood from] Russia."

and government don't like [wood from] Russia."⁸⁷ When questioned about the new declaration requirements for exports to the U.S., many Chinese exporters stated to EIA investigators that they generally declare China as the country of harvest on all of their shipments to the United States. False declarations are a violation of the Lacey Act and can result in seizure and forfeiture of the imported product.⁸⁵







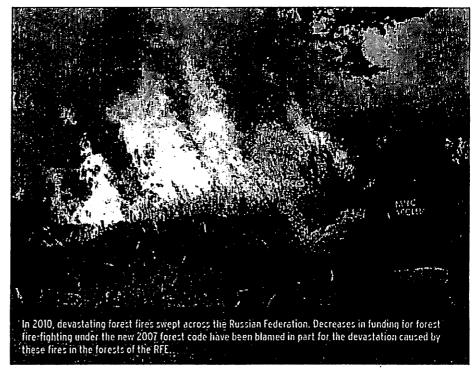
The forests of the RFE provide habitat for a wide variety of animals and plants, comprising one of the most biodiversityrich parts of the Russian Federation. Three-hundred-year-old oak and great Korean pine (Pinus koraiensis) trees nourish deer, boar, and other animals, which in turn support populations of the critically endangered Amur tigers (Panthera tigris altaica) and Far Eastern leopards (Pantera pardus orientalis), both among the rarest large animal species on the planet. Illegal loggers undermine the taiga food chain by targeting the key nut-bearing species that tiger prey species, including deer and boar, depend on for survival. Furthermore, illegal logging degrades critical habitat areas for these rare predators and their prey, opening up these formerly remote territories and increasing the risk of poaching, forest fires and further logging.

The sustainable management of Far Eastern forests is critical for the livelihoods of taiga village residents, including ethnic Russians as well as native tribes like the Udegai and Nanai, whose ancestors settled in the area approximately 10,000 years ago.90 Various forest industries, from logging and wood processing to hunting and trapping, pine nut gathering and beekeeping, provide a critical source of revenue and sustenance for tens of thousands of families across the region. Illegal and unsustainable logging threatens the health and livelihoods of forests, animals, and people, jeopardizing the future of the region's industry and economy.

ENVIRONMENTAL DAMAGE

Vast boreal forests of larch and spruce cover the northern regions of the RFE, transitioning to mixed conifer-broadleaved forests in the Sikhote-Alin range in Primorsky and southern Khabarovsky Provinces along the Chinese border. Russia contains 26% of the world's intact frontier forests, defined as "forests which are relatively undisturbed and big enough to maintain all of their biodiversity, including viable populations of the wide-ranging species associated with each forest type." In all, Russia contains ten times the area of frontier forests as the entire United States."

However, these vast figures hide the severe localized effects that illegal logging has on key ecosystems that are critical to the overall vitality of the region. The majority of Russian frontier forests are currently inaccessible, covering the remote northern regions of the Russian Federation. Decades of unsustainable logging practices and forest tires have left a large proportion of accessible forests severely degraded due to extraction of the most valuable timber or have converted rich forest ecosystems to low-value birch forests. There is little demand in the region for small diameter or low-grade timber, so logging is concentrated on the removal of large old-growth timber from previously



Bikin Under Threat

The Bikin River basin, located in northern Primorsky Province, is the largest single grouping of old-growth mixed temperate forests in the world. The middle and upper reaches of the Bikin River have never experienced industrial timber harvesting and support Korean pine-broadleaf forests of enormous ecological value, including habitat for 30-35 Amur tigers. The river is also home to one of the largest communities of Udege indigenous peoples, who maintain a traditional economy based on fishing, hunting, and the gathering of pine nuts and medicinal plants. Recognizing this unique combination of ecological and cultural value, the Soviet government maintained the Bikin Basin for decades as an informal reserve, while never assigning the majority of the territory official protected status.

Since the fall of the Soviet Union, the Bikin River basin has faced constant threat from timber companies wishing to access its vast timber resources:

1992: "Svetlaya" joint venture formed between the South Korean firm Hyundai and two Primorsky Province timber companies to log the coniferous forests in the upper Bikin. Provincial governor approved the project, but Duma (provincial legislature) overturned this decision following protests by Udege indigenous groups. A lawsuit brought by the joint venture was denied by Russian Supreme Court, which ruled that indigenous peoples have the right of formal consent for encroachment into their traditional territory.

1993: Primorsky Province Duma granted status of "territory of traditional natural resource use" to the middle Bikin basin.

1998: Verkhnebikinsky Forest Reserve established in upper Bikin basin.

2001: Coalition of Udege and environmental groups prevented Russian timber company Primorsklesprom from obtaining logging concessions in upper Bikin basin.

2003: Udege and environmental NGO coalition fought off industry-sponsored attempt to remove protective status from Verkhnebikinsky Forest Reserve.

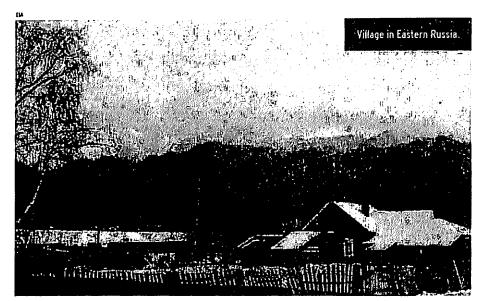
2007 and Timber companies attempted to obtain permits for intermediate and sanitary
2010: logging of valuable hardwoods in the Bikin floodplain, ignoring the fact
that these forests were already under lease to the Udege for non-timber forest product
harvesting, ignoring a pending request by the Russian federal government to list the
Bikin river basin as a UNESCO World Heritage Site.

2011: Logging giant JSC Les Export, already in possession of logging concessions in key tiger habitats in the Bikin River's lower reaches, applied to the provincial government to take the middle reaches of the Bikin basin under lease for timber harvesting. This application was denied following a strong public outcry, including a petition to Prime Minister Putin signed by 28,000 citizens.

As forests across the RFE become degraded, calls from the powerful timber industry for logging access to the Bikin River basin and other protective forests have grown stronger and more frequent. In a clear acknowledgment of the devastating effects of illegal logging on the region's timber supplies, these companies claim that only the opening of the Bikin River basin and other protective forests across the region can maintain employment and wood supply. The choice is stark: recognize and protect the unique ecological and social values of this great forest, or subject it to the same failed model of forest exploitation that has degraded so much of the region.



O Emprey Laporthis



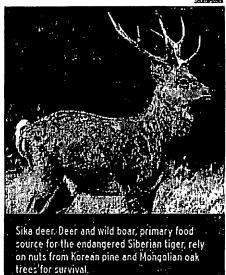
unmanaged forests. Especially in temperate forests, stocks of valuable timber are becoming increasing scarce and are often concentrated in protected areas or so-called "protective forests" (riverside forests, specially allocated pine nut harvesting zones, and some nature reserves) where commercial logging is restricted by law.⁵⁰

The unique old-growth Korean pine broadleaved forests are found only in the Sikhote Alin mountain range and its foothills, and in narrow strips of mountainous territory along the middle reaches of the Amur River. Illegal logging threatens to destroy this old-growth temperate hardwood forest ecosystem, the largest remaining in the world. The head of the Primorsky Province Forest Management

The depletion of nutbearing tree species like Mongolian oak, Korean pine and Manchurian walnut due to illegal logging poses a particularly severe threat to the region's ecosystem by undermining the whole food chain. Agency, caught on undercover video by Russian TV in 2009, summed up the extent of this damage, stating casually that all the commercial oak and ash timber in his province will disappear in only 5 or 10 years.⁹⁴

The depletion of nut-bearing tree species like Mongolian oak and Korean pine due to illegat logging poses a particularly severe threat to the region's ecosystem by undermining the whole food chain. These species provide a critical food source for wild boar, red deer, Sika deer and roe deer, on which both taiga hunters and rare predators like the Siberian tiger depend. A total ban on Korean pine logging imposed in 2010 has helped slow the destruction of this so-called "bread tree," but illegal logging of Mongolian oak continues at shocking rates.95 Illegal loggers increasingly target riverside protective forests where commercial logging is limited or prohibited by law, with long-term negative consequences for these biodiversity-rich ecosystems. Deer and boar concentrate in river valley forests in the winter months, attracting large predators to these forests as well.

These forests provide prime nesting habitat for many endangered bird species, and they are critical for protecting the spawning grounds of the world's largest salmon species. Logging in these areas has significant ripple effects through the rest of the ecosystem. Root systems help to stabilize riverbanks and hillsides, and extensive logging leaves these areas vulnerable to landslides and erosion. The world's largest species of salmon risk extinction, due to overfishing and habitat loss.



The roads and skid trails created by illegal loggers to access previously untouched forests open up these territories for poaching, forest fires and further illegal logging activity, leading to their rapid degradation. Even legal logging in the RFE is three to four times less efficient than in other Western countries, due largely to outdated equipment, lack of infrastructure, and significant waste throughout harvest and processing practices.97 Illegal logging is even worse, since illegal loggers often drag out only the most valuable twelve-foot sections of gigantic 300-year-old trees. The search for the largest, straightest trees leads to a proliferation of small logging roads. These roads lead other bands of illegal loggers deeper and deeper into remote forests, causing further deforestation and forest degradation. The resulting decrease in canopy cover dries out the forests, and the wood chips, branches, and low-grade timber left behind by loggers provides ready kindling for immense forest fires which regularly flare up during hot, dry summer months. Experts estimate that changes under the new 2007 Forest Code reduced the number of forest rangers by 75%, by shifting federal requirements to local authorities and forest owners.99 President Putin, in a speech in April 2013, criticized the system of forest fire management, noting that there were nearly tive times fewer firelighting professionals in Russia compared to 2005.99 Decreases in funding for forest fire-fighting under the new 2007 forest code have been blamed in part for the devastation caused by these fires in the forests of the RFE.100



Russia's vast boreal forests sequester an estimated 500-700 million tons of carbon per year^{ton} and contain an estimated 28% of global terrestrial carbon. 102 However. climate change and logging threaten to melt the permafrost holding vast quantities of methane and carbon dioxide from decomposing plant matter frozen in the soil. As temperatures rise, this permafrost turns into swamp, releasing these gasses. Clearcutting, which accounts for as much as 90% of industrial logging in the spruce and larch forests of the RFE, increases permafrost melting by exposing soil to direct sunlight. Russian forests already release release an estimated 1.26 million tons of CO, equivalent annually from methane emissions.100 Experts estimate that melting permafrost due to

logging and climate change will make Russian forests a net contributor to climate change by the end of this century.¹⁰⁴

SOCIAL AND ECONOMIC IMPACTS

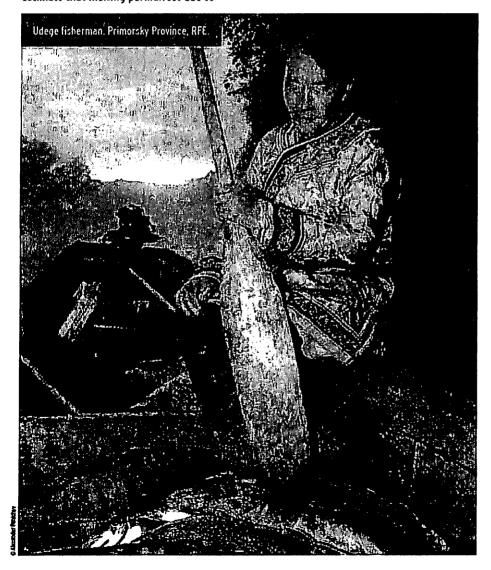
Direct forestry activities contribute 5-10% to the GDP of the RFE, and indirect contributions of forestry for families and related service jobs make it one of the most important industries in the region. In addition, the diffuse nature of the industry means that the economic benefit of forestry is spread among a wide array of towns and villages dispersed across the landscape. The forests of the RFE provide a safety net for forest communities, providing a vast array of services necessary for survival, including tirewood for cooking and heating.

food such as pine nuts, linden honey, deer, boar and salmon, as well as revenues from logging and wood processing. The collapse of the Russian wood processing industry following the fall of the Soviet Union impoverished many local communities, increasing their reliance on forests to provide these kinds of alternative forest products.

Illegal logging stimulates and enables corruption and bribery in forest regions across Eastern Russia. 106 President Putin noted this in a recent address, stating that, "Besides direct damages, the (illegal logging and illegal wood trade] also lead to dishonest competition and criminal pressure on the roundwood market."107 In some parts of the RFE the illegal logging business is as profitable as that of illegal drugs, weapons and alcohol trafficking.106 Local people whose livelihoods are damaged by illegal loggers find little protection from police and forest officials, who are often bought out by logging syndicates. Corrupt officials grant firewood permits to industrial loggers, forcing villagers to cut illegally in local forests to simply heat their homes through the long winters. Lacking the protection provided to industrial loggers, it is often these poor villagers who are arrested as illegal loggers.109

In 2010, 1,639 cases of illegal logging were officially reported in the RFE. The Russian Federal Forest Agency estimated total damage to the environment and forest economy at over four billion rubles. Russian forestry experts estimate that these figures represent less than 10% of actual totals. Domestic wood products manufacturing, once a mainstay of the local economy, is severely undermined by the decline in commercial limber stocks.

An estimated 100,000 indigenous members of the Udege, Nanai, Evenks, and other groups live in traditional villages throughout the RFE.ⁿ² Many of these groups were officially granted forests for traditional use in the 1990s.ⁿ³ In recent years, these groups have had to fight off continued unofficial incursions by illegal loggers, as well as official government attempts to downgrade the status of their lands to permit industrial logging. The ongoing threats to the middle and upper Bikin River basin, the single largest remaining preserve of temperate mixed hardwood forests in the world, provide a clear illustration of this situation (See "Bikin Under Threat," p. 25).





The Russian Far East (RFE) covers the entire eastern third of the Russian Federation, spreading over an area two-thirds the size of the United States.™ Its wealth of natural resources, including oil, gas, coal, minerals including gold and diamonds, forests, and pristine lisheries, creates economic potential for a strong and stable economy. Instead, these resources are being depleted at unsustainable rates, the revenues squandered by small numbers of powerful individuals, while contributing very little to the regional economy.

HOW DID IT GET THIS WAY? - A BRIEF HISTORY OF THE FOREST INDUSTRY IN EASTERN RUSSIA

During the Soviet era, logging and wood processing developed into large scale industries. providing raw timber, logs, finished wood products, and pulp and paper. Roughly 70% of all timber cut was processed within Siberia and the RFE.^{ns} Throughout this period, Russian loggers pushed deeper into Russia's frontier forests. The availability of Russia's vast frontier forests has discouraged proper forest management, as high-quality old growth timber brings more immediate returns than long-term investment in forest farms. As a result of unsustainable logging practices and related forest fires, vast areas of commercially accessible forest areas now contain predominantly less valuable white birch and aspen.™

The fall of the Soviet Union brought about a collapse in nearly all sectors of the formal economy in the RFE. Large state-owned logging corporations dissolved, and in many cases groups of former employees salvaged equipment and machinery to form numerous

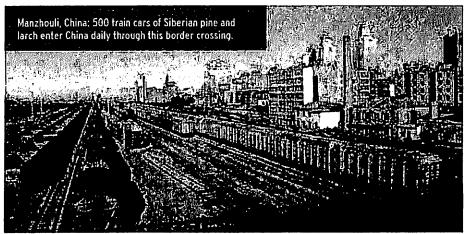
independent logging companies. By 2000, 70% of all timber cut was exported as logs, mostly to Japan, with little to no value added within Russia.™ Funding for forest protection institutions saw drastic declines. The World Bank reported that by 1996 forest enforcement and management institutions in the RFE received only 20% of the budget they received in 1985.™ Loss of government funding left forest bureaus struggling and unable to undertake basic oversight and law enforcement functions.

DEMAND FROM CHINA GROWS

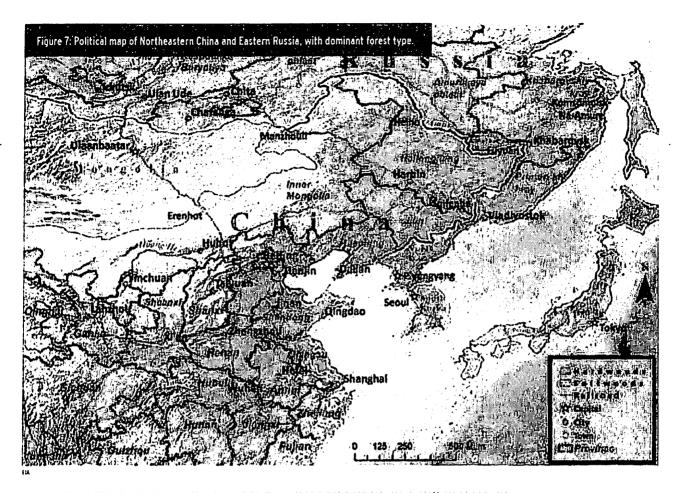
In 1998, the Yangtze River overran floodwalls in central China, killing more than 3,000 people. Blame was largely placed on widespread deforestation and the resulting extensive soil erosion. That year the central government declared a near complete freeze on domestic logging of natural forests throughout the country. This freeze, combined with rapid growth in the Chinese manufacturing sector,

created a sudden and dramatic need for external wood supplies.²⁰ The proximity and vastness of Eastern Russia's forests provided an easy solution, and during the 2000s China took steps to encourage timber imports by reducing import-related taxes and duties by 50% and by instituting export tax benefits for processed timber products made from imported wood.¹⁰

During this period, China rapidly eclipsed Japan as Eastern Russia's major export partner for timber products. In 2012, 64% of all timber sector exports from Eastern Russia flowed directly to China, while Japan received only 5% directly. Despite a brief drop in exports during the global recession in 2008, exports of wood to China have continued to grow (See Figure 8, p. 29). Exports of finished products from China to Japan, the U.S., and EU have followed a similar pattern during this period, suggesting that Russian timber still makes up a significant proportion of timber products on sale in the Japanese market and an increasing proportion of products on sale in the United States and EU.



E



RUSSIA EXPORTS TO CHINA OF WOOD-BASED PRODUCTS BY RWE VOLUME (M3) IN MILLIONS

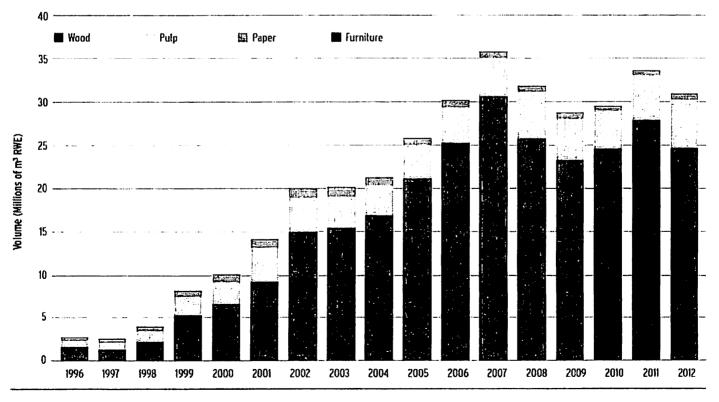


Figure 8 Source: Russia customs dat

Relevance of Species, Use in Trade, Key Info Points

SCOTS PINE / 红松 / COCHA / PINUS SYLVESTRIS

Russia-China Exports, 2012, by RWE Volume (m²)



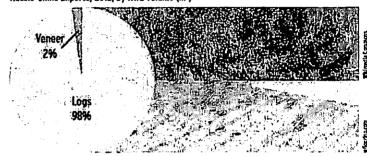
Average listed price, per m³:

Sawn Lumber: USD \$127, Logs: USD \$100 Uses:

Domestic Chinese construction (primary material and concrete frames); plywood construction; decking

LARCH / 落叶松 / ЛИСТВЕННИЦА / LARIX SPP.

Russia-China Exports, 2012, by RWE Volume (m³)



Average listed price, per m³:

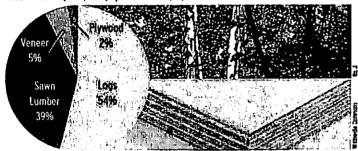
Uses:

Logs: USD \$93, Veneer: USD \$292

Plywood face and back; flooring; decking; construction

BIRCH / 桦木 / БЕРЕЗА / BETULA SPP.

Russia-China Exports, 2012, by RWE Volume (m³)



Average listed price, per m³:

Logs: USD \$93, Sawn Lumber: USD \$135, Veneer: USD \$284, Plywcod: USD \$577 Uses:

Plywood face and back; flooring; furniture

OAK / 标本 / ДУБ / QUERCUS MONGOLICA

Russia-China Exports, 2012, by RWE Volume (m3)



Average listed price, per m³:

Sawn Lumber: USD \$253, Logs: USD \$212, Veneer: USD \$247 Furniture, flooring (solid and engineered surface)

Key ecosystem species due to acorn production - food

for deer, wild boar

Uses:

ASH / 白蜡木/水曲柳 / ЯСЕНЬ / FRAXINUS MANDSCHURICA

Russia-China Exports, 2012, by RWE Volume (m²)



Average listed price, per m³:

Logs: USD \$207, Sawn Lumber: USD \$262 0262:

Furniture - bed frames, chairs, tables

LINDEN / 椴木 / ЛИПА / TILIA MANDSHURICA

Russia-China Exports, 2012, by RWE Volume (m³)



Average listed price, per m³:

Logs: USD \$177, Sawn Lumber: USD \$148, Veneer: USD \$415

Plywood face and back; window blinds, door frames,

other furniture



SPECIES	RWE VOLUME (M³)	VALUE (USD)	% OF TOTAL RWE VOLUME
Scots Pine	12,626,573 m³	\$1,028,978,878	51.97%
Larch/Spruce/Fir	9,048,348 fn³	\$728,891,409	37.24%
Birch	1,099,837 m³	\$98,919,693	4.53%
Oak	481,577 m³	\$74,217,606	1.98%
Ash	335,580 m³	\$56,600,745	1.38%
Poplar	204,903 m³	\$15,643,247	0.84%
Elm	191,113 m³	\$13,221,856	0.79%
Linden	190,124 m³	\$18,313,428	0.78%
Siberian Pine	120,008 m ³	\$13,382,814	0.49%
Grand Total	24,298,063 m³	\$2,048,169,676	100.00%

Table 3: Species breakdown of Russian wood product exports to China, 2012.

Source: Russian Customs. Russia's eastern forests contain many species similar to those found in temperate forests around the world; these species are thus often interchangeable in the forest products industry with similar coniferous and hardwood species from the U.S., Canada, the EU. New Zeeland, and Chile.

A SUPPLY CHAIN RIFE WITH ILLEGALITY

The Russian Far East has always maintained the perception of being a "Wild East." The resource extraction-based economy which dominates post-Soviet Eastern Russia, combined with a breakdown in legal norms and good governance, has created a system which disincentivizes long-term planning, sustainable forest management and environmental protection. As much as 80% of valuable hardwood exports to China consist of illegally sourced old-growth timber, which are often from protected and protective areas, laundered using forged documents, and/or given official stamps for a fee by corrupt forest officials. The illegal timber is then mixed in with legally sourced timber from the RFE and shipped across the border to China.

GOVERNMENT ACTIONS

Government actions over the past three decades have had serious, negative consequences for forest governance. In 2000, the Russian forest sector underwent a nation-wide organizational restructuring that weakened management and control at the federal and provincial levels and cut back funding for forest service staff. A further revision to the forest code in 2007 opened up vast areas of protective forest lands for commercial exploitation for selective logging.™

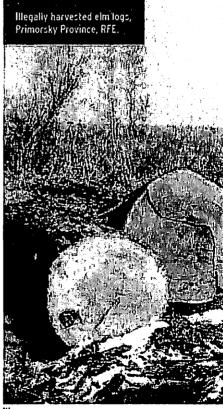
LACK OF RESOURCES FOR **GOVERNMENT AGENCIES**

By the mid-1990s, resources allocated to overall forest governance needs had fallen to an estimated 20% of mid-1980s levels.12 Some experts estimate that real financing for silviculture and forest science activities decreased to 10% of previous levels from 1990 to the present, and to 20 25% of previous levels for forest inventory and aerial fire control.120 NGO experts estimate that changes under the new 2007 forest code reduced the ranks of forest rangers by 75% by shifting federal requirements to local authorities and forest owners.129 The severe lack of resources for enforcement as well as a lack of technical and scientific capacity has had devastating impacts on the RFE's forests. The system for conducting regular scientific forest assessments common during Soviet times has broken down, meaning that harvest guotas are based on outdated assessments of forest stocks which fail to account for the millions of cubic meters of illegally logged timber that have been extracted during the past three decades. President Putin recently noted that the government lacked complete and accurate information about the number or quality of forest resources, stating that this information covered only 19% of forest areas.⁵⁰ Lack of accurate, up-to-date scientific assessments are also partly to blame for a system of protected and protective areas that often fail to cover actual areas of high biodiversity. those in need of the greatest degree of protection.13

OVERVIEW OF LOGGING IN THE RFE -FLOWS FROM FOREST TO BORDER

SECTION 1: SCALE AND ESTIMATES OF ILLEGAL LOGGING IN THE RUSSIAN FAR EAST

A recent analysis by WWF shows that, over the past decade, actual levels of oak logging for export from Primorsky and Khabarovsky Provinces were two to four times higher than official government harvest quotas, meaning that at least half of all oak exports over the past ten years have been illegal in origin.122 Given that harvest quotas are based on inaccurate and outdated surveys and include unusable or inaccessible limber, and that much officially



harvested timber is actually harvested illegally in protective areas, the actual figures are likely to be much higher. EIA investigators were told repeatedly by many industry sources across the region that at least 80% of all logging across Eastern Russia is conducted illegally. When questioned about what percentage of their sourcing is "black wood," a literal translation from Chinese understood to mean illegal, one Chinese sawmill owner in Eastern Russia said, "almost all of it is." At another sawmill, the owner told investigators that 80% of companies buy stolen wood from small private logging brigades.

In 2010, 1,639 cases of illegal logging were registered by forestry officials in the RFE, with a total of 126,800 m³ of timber stolen and over 4 billion rubles in estimated damages to the economy and environment.³⁴ However, given the severe staffing and resource allocation shortfalls facing Russian federal and regional forest law enforcement officials, these figures will necessarily make up only a small proportion of total illegal timber felling. The recent WWF report highlights numerous deficiencies in official data for illegal logging. In many cases where illegal logging was officially registered by forestry officials, volumes registered reflected only a small proportion of actual timber fost.³³

SECTION 2: ILLEGAL LOGGING IN PRACTICE: SOURCES OF TIMBER

Following decades of intense illegal logging, the best quality hardwoods, those most desired by the industry, are found primarily in protective areas. Officially, logging companies are granted permission to harvest on concessions on state forest lands. In practice, a significant proportion of valuable hardwoods are often cut from protective areas, with companies falsifying paperwork and bribing officials to launder this illegally cut timber.

Timber Source #1: Concessions on State Forest Land

Virtually all forest lands in the RFE are officially owned by the federal government. The Russian government provincial forestry bureaus allocate forests designated for commercial production, which represent around 85% of the total, among numerous large and small concession holders. Each concession holder is required to manage his concessions according to long-term harvest plans and environmental regulations prohibiting cutting of certain species or felling in certain locations, such as along rivers and on steep slopes. The Federal Forestry service and its local representatives are responsible for monitoring the activities of these leaseholders. So Severe budget cuts

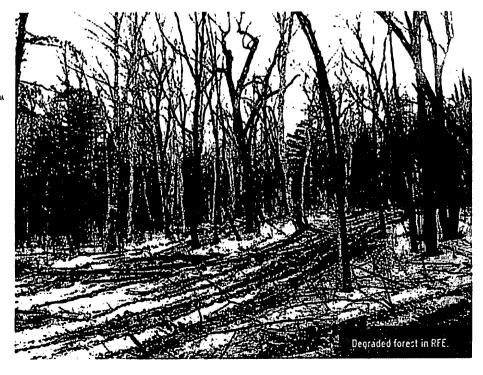
for provincial forestry bureaus have limited official monitoring and assessments, leaving leaseholders to cut as much as they want, where they want, both on and off their concessions, with relative impunity.

When questioned about what percentage of their sourcing is "black wood," a literal translation from Chinese understood to mean illegal, one Chinese sawmill owner in Eastern Russia said, "almost all of it is."

Corrupt concession allocation and violations by concession-holders

Prior to changes in the forest code in 2007, most logging concessions were issued only through public auctions. Auctions were widely reported to be fixed in favor of the company that paid the highest bribe, rather than offering the highest price at auction.140 President Putin highlighted this problem in a speech in April 2013, "Those who win are predominantly organizations close to the government or its intermediaries. The people who live near the forest often cannot get wood for their own needs at an affordable price, so they are forced to beg from local authorities. demean themselves, run around from office to office, and pay too much. This is, of course, simply a manifestation of tyranny."19

Revisions to the Federal Forest Code in 2007 created incentives for companies to undertake priority investment projects. In exchange for discounted concession permits, companies must agree to build processing facilities for finished products, or infrastructure such as roads or hospitals.¹⁴² Although this new system has only been in operation since 2011, numerous instances of misallocation of concession rights have already been reported. President Putin also noted in April 2013 that of the 118 projects that had been approved



Chinese Timber Traders in Siberia

Russian hardwoods come from a unique ecosystem in immediate danger of degradation beyond repair. However, 90% of timber sector exports from Eastern Russia consist of coniferous softwoods, primarily Scots pine (*Pinus sylvestris*, 52%) and larch (*Larix sibirica*, around 30%). EIA investigators visited Siberia and Manzhouli, the main Chinese import point for Siberian timber. Initial visits and conversations with forest sector operators in Siberia confirm similar levels of illegality and similar practices as those described above in the hardwood forests of the RFE.**

In order to gain a better understanding of this critical supply chain, which comprises more than 20% of China's timber import needs, is EIA investigators traveled to the small but bustling city of Manzhouli in China's Inner Mongolia Province, port of entry for 56% of China's timber imports from Russia.™ On an average day, over 500 train cars full of Russian logs and sawn timber arrive in Manzhouli. As in Suifenhe, much of this timber is imported by trading companies, bought immediately by large mills, and transported directly to their lumber yards, which sprawl into the steppe to the east of the city. A majority of this timber is destined for Chinese domestic use, often serving as stints and frames for concrete buildings sprouting up all around the country. However, vast quantities end up as furniture and other products destined for export to the U.S., EU, and Japan. The importance of Manzhouli as a trading center is so great, that demand there directly affects production and wood types processed at remote Russian sawmills. A sawmill owner in Irkutsk Province told EIA investigators that he could respond quickly to shifting demands in the Chinese market; "If you send me information that in China now pine is good, give me a call, tell me what specifications you need...! will move quickly and buy, process and send it to you." 168

EIA investigators next visited a handful of small sawmills scattered across the Irkutsk region, near Siberia's iconic and pristine Lake Baikal. Chinese sawmill owners and traders spoke of practices very similar to those recounted in the RFE. While clear-cutting, often for pulp and paper production, remains common in more remote northern forests, selective logging appears to be the norm in the areas around the export-focused mills along the Trans-Siberian railroad. Mill owners told undercover EIA investigators that because of past overcutting in more accessible areas the only good timber could be found two or three days away. One mill owner explained that around half of his wood came from four or five regular suppliers, which he said regularly overcut around 50% more than was allowed by permits. The other half consisted of "black wood," illegally harvested by small individual Russian logging brigades. Either these

brigades, or the sawmill owner himself, simply print off a fake permit and pays the local forest official between USSD \$3-6 per cubic meter for an official stamp.**

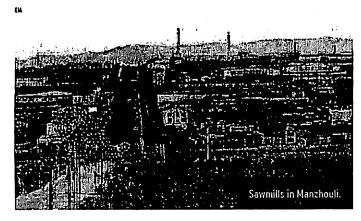
Even Chinese mill owners and traders in Manzhouli showed a keen awareness of the frequency of illegal business practices in Siberia. The vice president of one Manzhouli-based company, a man with extensive operations and personal experience in Russia, described the nature of the wood he buys from small Russian logging brigades and the ease of laundering this wood: "It is illegal to buy wood from the Russians...As long as you are not caught on the spot, you just call it your own wood."

A federal government crackdown in Irkutsk Province in Eastern Siberia in August 2013 uncovered a vast international organized criminal organization that has allegedly exported two billion rubles (USD \$60 million) of illegally harvest timber over the past three years. According to official press releases and Russian media reports, the organization systematically purchased timber from illegal loggers, laundered it

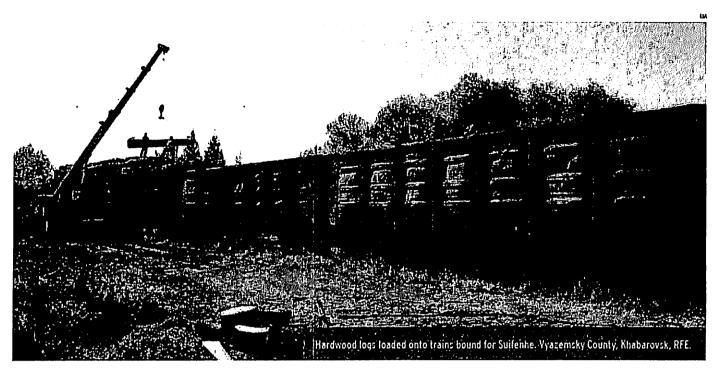
"It is illegal to buy wood from the Russians...as long as you are not caught on the spot, you just call it your own wood." - Chinese trader

through a series of companies set up for one day for the sole purpose of trafficking in timber, falsified documents to hide its origins, and exported it to China. The organization was led by a Chinese national who worked with numerous Russian individuals and businesses in Irkutsk, Novosibirsk, and St. Petersburg. At the time of the raid, officials seized 40,000 m³ of timber and sawn boards, enough to fill 1,000 train cars. News reports indicate that investigations remain ongoing, targeting other similarly large networks.^m

Given the vast forest area under commercial harvest across Siberia, and the enormous quantities of timber shipped to China and elsewhere, it is difficult to determine precise figures for illegal logging rates across the region. However, if these initial visits are any indication, Siberia faces many of the same problems as those found in the RFE, including massive amounts of illegal logging.







for priority status, only 26 had so far been implemented, and the rest existed only on paper or had hardly begun. 43

Legitimate timber concessions rarely contain the volumes of timber listed on official documentation, due to the lack of adequate forest inventories, combined with decades of illegal logging. A sizeable proportion of the valuable hardwoods remaining in the RFE are secondary growth timber, often with too many bends and knots to be useful to industry. which are counted together with valuable oldgrowth timber to determine total sustainable harvesting amounts. With drastic declines in funding for forest management bureaus, prior field surveys by officials are no longer required before harvesting operations may begin. Instead, logging companies themselves are merely required to declare before and after cutting the volumes and species harvested. These documents, created entirely by the companies, are taken to the local forestry bureau, where an official stamp is given, often without any oversight. Post-harvest site verification visits by forest officials are also increasingly rare.

Since commercial timber supplies have been depleted in many concession areas, permit holders often obtain timber from restricted areas within their concessions, from outside

their concessions, from neighboring concessions or even from protected and protective forests. In many cases, it is widely suspected that concession owners will hire and equip private logging leams to conduct this illegal harvesting for them. If these teams are arrested, the leaseholders claim ignorance of these operations. In one instance observed in 2012 by law enforcement officials in Khabarovsky Province, an illegal logging site was found operating concurrently two kilometers away from the company's official logging camp. The leaseholder

According to one Chinese forest owner in Eastern Russia, the 49-year lease on their forest concession is, "a right to cut in total 1.4 million m³. Each year...they give you permits for over 30,000 m³, in reality...even if you cut 80,000 m³, do they check?"

claimed that this illegal logging was happening without their knowledge, even though all illegal logs, loggers, and machinery would have passed along the only single-lane dirt road in the area that went right through the legal site over a period of weeks (See "Investstroy LLC," p. 16).

Forest concession owners are allowed to cut a certain amount of timber in a certain area of the concession each year, for which the provincial forest agency grants them a "forest declaration." Leaseholders explained to EIA undercover investigators that these permits can be used for timber cut elsewhere within the concession, or for timber cut outside the concession. According to one Chinese forest owner in Eastern Russia. the 49-year lease on their forest concession is, "a right to cut in total 1.4 million m³. Each year...they give you permits for over 30,000 m³, in reality... even if you cut 80,000 m³, do they check?" 144 These permits can be duplicated to cover more timber than specified. In another case, EIA investigators found that forest declaration permits authorizing the cutting of 5,000 m³ were applied to the sale of 12,000 m³ of timber.15 Concession holders explained to EIA investigators that they purchased forests explicitly for this purpose; that they don't even cut much in their own forests, since the wood in these actual concessions is often of lesser quality than that which can be cut illegally elsewhere (See "Part 1: Liquidating the Forests," p. 12).

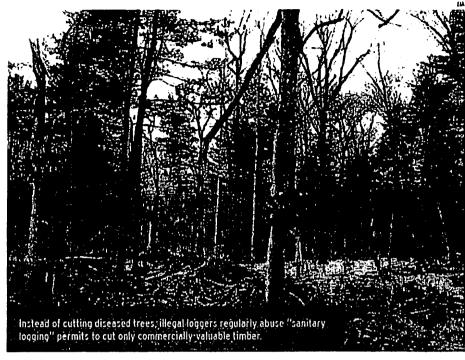
Timber Source #2: Protective Areas

State Logging Enterprise — sanctioning logging in protective forests

Given the extensive nature of both legal and illegal timber harvesting over past decades in the RFE, the most easily accessible commercially valuable timber now lies primarily in protected and protective areas. Protected areas cover national and provincial parks, including some candidate UNESCO world heritage sites. Protective areas include nature reserves, riparian zones along streams, or forests set aside for local forest product production, such as gathering the nuts of Korean and Siberian pines.

Officially, logging may be conducted in these protected and protective forests primarily for the very specific purposes of "sanitary" or "intermediate" harvesting. Sanitary cutting refers to harvest of diseased trees, or those damaged by fire or storms. Intermediate logging is a practice, rarely implemented correctly, of cutting small trees to provide room for larger trees to grow. These two methods are widely abused as loopholes for logging millions of cubic meters of healthy, valuable old-growth trees every year. 146

In Primorsky Province, the State Logging Enterprise, a branch of the provincial Forest Management Agency, issues permits for sanitary and intermediate logging. Khabarovsky Province instead delegates this power to each individual forest management unit. In practice, the system functions similarly in both provinces. The State Logging Enterprise either conducts the sanitary or intermediate logging of damaged, diseased or undersized

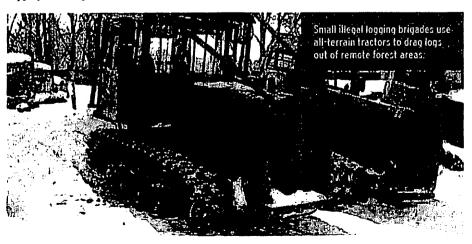


trees itself or sells permits for or subcontracts third-parties to do so. Officially, this wood would rarely be commercially valuable as timber. However, in 2010 3.5 million m³ were cut in the RFE using these permits.¹⁷ In March, 2012, senior forest rangers within the Forest Management Agency from Primorsky Province sent an open letter to the provincial governor, complaining that the State Logging Enterprise "comprises one of the primary channels of illegal wood in the province." Caught in an undercover interview in 2010, the then head of the Primorsky provincial Forest Management Agency, Pyotr Diuk, spoke openly about the extent of his department's violations, frankly

explained the abuse of intermediate logging by the State Logging Enterprise: "Intermediate logging, that's when you cut the sick trees and the healthy and quality trees remain. But today the healthy trees get sent to the mill, and all the sick trees get left alone. That is, everything's abnormal. But that's how we live today. When this all ends — I don't know."

SECTION 3: RURAL SAWMILLS - LAUNDERING AND "LEGALIZING" ILLEGAL TIMBER

In the wake of the collapse of the Soviet Union, small timber processing enterprises sprouted up across the country. As of 2002, there were around 3,500 state-owned and 33,000 private companies engaged in timber cutting, sawing and processing across Russia.150 These sawmills, whether large or small, often function merely as timber yards, gathering logs from various sources for sale onwards. In some cases the logs are sawn into boards at these mills, in others, they are sold directly as logs. Many sawmills are owned by larger companies, which often own dozens of sawmills and tens of thousands of hectares of forest land. However, a small percentage of wood for these sawmills actually comes from these concessions, the majority of the wood is purchased through large or small traders, or even individual local logging brigades.151



As noted above (See "Timber Source #1: Concessions on State Forest Land," p. 32). timber nominally acquired directly from a company's own concession is often at high risk of being illegal in origin. However, timber obtained through trading companies, accounting for the majority of timber exported from the RFE, is at even greater risk of illegality. These trading companies obtain their timber from numerous small and medium sawmills scattered in small villages throughout the region. These sawmitls often operate without any legal permits, instead bribing local forest officials to allow their continued operations. The majority of these small sawmills, and many of the large ones, are loday owned and operated by Chinese nationals, functioning under the protection of large Chinese syndicates with high-level Russian connections throughout the regional government. (See "Part 4. Enter the Dragon: Chinese Businessmen in Russia," p. 38)

Logs are frequently obtained from forests near the sawmills, and are often directly purchased from small, unofficial brigades made up of local villagers. These brigades are often linked to organized criminal networks, and have good connections with local authorities.152 Often armed, these brigades travel light along narrow, frozen forest paths in search of the largest, most valuable trees. These they fell using special noise-dampening chainsaws, dragging them out of the forest with tractors. 50 Only the straightest, branchfree sections are taken, often no longer than

ten feet in length, while the remainder of the felled tree is left in the forest. These logs are either loaded on trucks or dragged directly to local sawmills by tractor, thus avoiding police checkpoints along the main roads.

"These small suppliers, for example, get a cutting permit for 125 cubic meters... In reality, he may cut 1,000 cubic meters, he uses this cutting permit, each time you check on me, I always have this cutting permit."

Sawmill owners "legalize" the timber with fake documents, which they or their agents fill in with false information. Sawmill owners told undercover EIA investigators that official stamps from local forest bureaus can be bought illegally for 100-200 rubles (\$3-6 USD) per cubic meter for softwood.154

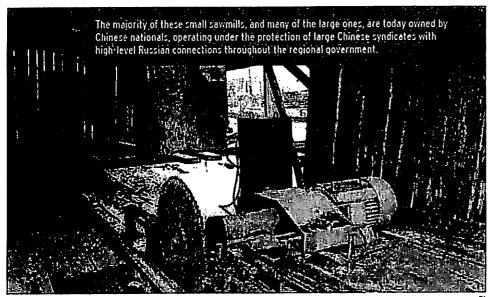
Local county forest bureaus allocate a certain quantity of permits for cutting wood for personal use in local forests, which are meant for use by local villagers, who are dependent on wood for all heating and cooking, as well as house construction and repair needs. Villagers and local NGOs report that these permits are commonly sold to sawmills and trading companies to be used for commercial logging, which results in villagers having to illegally cut trees for survival.150 The Russian federal government has openly acknowledged this as a problem related to exported timber. Prosecutor General Yuri Chaika noted recently, "We observed the uncovering of a serious issue. which has become widespread - the illegal logging of timber at an industrial scale with the use of documents from municipal organs, which in principle should authorize only harvest of timber for personal use. But instead industrial logging occurs, and the wood moves on, for the most part to China."55

In conversations with Chinese sawmill owners in rural parts of Eastern Russia, each one told EIA investigators that they were purchasing much or all of their wood from loggers cutting in nearby forests, even when the documents provided by these sawmills to prove legality of the wood listed forest concessions associated with their own sawmills hundreds of kilometers away.197 Enforcement officials often fail to investigate even such obvious violations.158

One sawmill owner described in particular detail how his suppliers abuse "personal use" permits to cover vast amounts of commercial cutting, "You see we buy from small suppliers, and there are many of them. These small suppliers, for example, get a cutting permit for 125 m³, the forest management gives you a place and says. here, 125 m³, 70 m³ for building, rest for fuel, and gives you the cutting permit. In reality, he may cut 1,000 cubic meters, he uses this cutting permit, each time you check on me, I always have this cutting permit." When EIA asked specifically if they were using the same permit. he replied, "Right. [Forest management] gives it to him, it is in fact, a lease, [the forest] is leased it to you, you pay a bit of money. During the lease time, you in fact can cut as much as you want."199

SECTION 4: TRANSPORT TO THE BORDER

Logs and sawn boards from local sawmills are purchased by trading companies or larger sawmills, and loaded onto large open trucks for transport. At the large sawmills, logs and



boards are loaded straight onto train cars on designated rail spurs on the property of these sawmills. Most logs and sawn timber pass either via rail or by truck from these sawmills directly to the Chinese border.

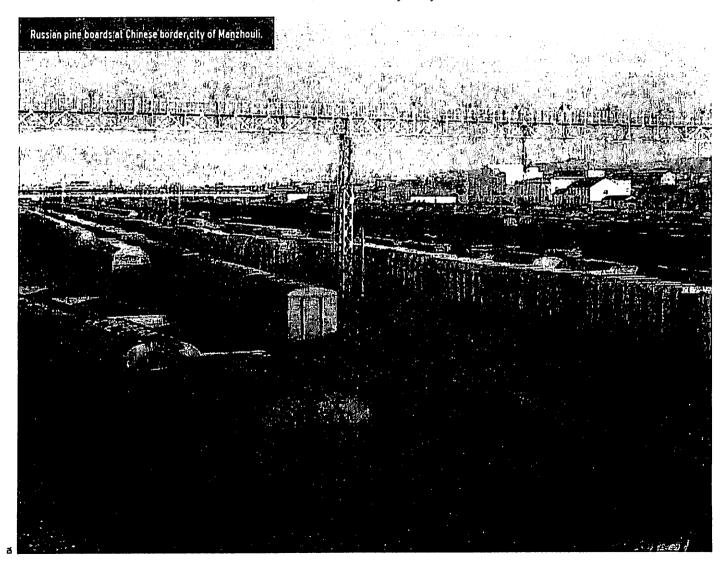
Every shipment of logs or lumber must pass through numerous checkpoints along the way, where drivers must produce required documents including a transportation bill listing quantity, type, and value. However, these documents are not required to show the exact concession or location of origin where the timber was harvested. In the early 2000s, Primorsky Province began a pilot study, adding a requirement to list concession of harvest on transport documents. However, in 2005, this requirement was dropped. For illegally

harvested timber, transport documents must either be forged or purchased illegally prior to transport. The other alternative for "legalizing" timber shipments is to bribe police officials. EIA investigators witnessed such a transaction firsthand during a previous investigation, when the driver of a truck carrying illegally sourced timber was observed handing cash to a police officer at a road checkpoint. **E2**

SECTION 5: CROSSING THE BORDER

During the Soviet era, export points were few and very strictly controlled. During the 1990s, the number of border crossings used for timber export increased dramatically, including river barges along the Ussuri and Amur River borders with China, small ports along the Pacific coast, and truck crossings along the

mountainous southernmost border with Jilin and Heilongjiang Provinces into China.163 Since 2005, due largely to the concentration of Chinese wood processing industries in just a few border towns, the number of border crossings has decreased again. Today, the vast majority of timber flows from Russia into China via three major land checkpoints, into the cities of Manzhouli, Suifenhe, and through Mongolia to Erenhot (See Figure 2, p. 13). However, despite the closure of many official river crossing points, reports indicate that timber still crosses the border illegally at many points along the extended river border, often on ice roads during the lengthy winter months. The vast majority of valuable hardwoods from Russia flow into China at the border crossing of Suifenhe.





Starting in the early 2000s, China quickly edged out Japan and South Korea to become the largest destination for logs and sawn timber from the forests of Siberia and the RFE. Today, nearly 90% of all timber exports from the RFE are destined for China, compared to less than half in 2000.¹⁷² The surging demand for timber in the rapidly expanding Chinese manufacturing sector, combined with heavily restricted access to domestic Chinese hardwoods and the proximity to relatively inexpensive Russian timber, is primarily responsible for this increase.

Since the 1990s, Chinese immigrants have come to dominate the wood trade in the RFE. Most of them arrive from neighboring Heilongjiang Province, Russia's neighbor across the Ussuri and Amur rivers, bringing with them vital connections to traders and manufacturers in the key border town of Suifenhe, the neighboring city of Mudanjiang, and throughout northeastern China. Chinese workers now operate in nearly all facets of the RFE timber industry. Rural Chinese farmhands work winters in Russian sawmills, while Chinese students of the Russian language find office work managing operations and finances.⁷³

From 2007 until 2008, the Russian government gradually raised duties on log exports to 25%, in an effort to stimulate domestic processing of timber products. This policy has succeeded in decreasing the proportion of log exports from 84% in 2007 to 51% in 2012.¹²⁴ However, the vast majority of this increase in domestic production is made up of crudely sawn timber. Chinese operators have quickly come to dominate the sawmill industry across Eastern Russia, and by many estimates a majority of the region's sawmills are Chinese owned and operated.¹⁷⁵

EIA investigators encountered many small villages in remote parts of Primorsky and Khabarovsky Provinces with a number of Chinese sawmills each. Local forestry officials confirm that many of these sawmills operate illegally, reporting that the mills have bribed local government officials for the right to operate without having obtained the proper documents.⁷⁶ According to many of these sawmill owners, any profits earned are repatriated to China, often put towards investments in real estate.⁷⁷

In Russia, foreigners face numerous restrictions against owning land or businesses. The hundreds of Chinese-run sawmills, trading, and export companies generally register under Russian proxies - either the well-connected relatives of politically powerful officials, or even using the name of an impoverished villager, often without their knowledge.™ Some Chinese businessmen EIA encountered have lived and thrived in the RFE for 20 years. but these few are the exception. The status of Chinese businessmen in Russia is always a precarious one, and EIA investigators heard many accounts of Chinese actors involved in the wood trade who had fallen afoul of Russian authorities and were forced to return to China. All Chinese businessmen EIA spoke to talked of being ready to leave at any moment, despite the often sizeable investments they had made. This unsettled attitude has fostered a "get it while you can" mentality, as Chinese traders have little incentive to invest in long-term sustainable forest management.179

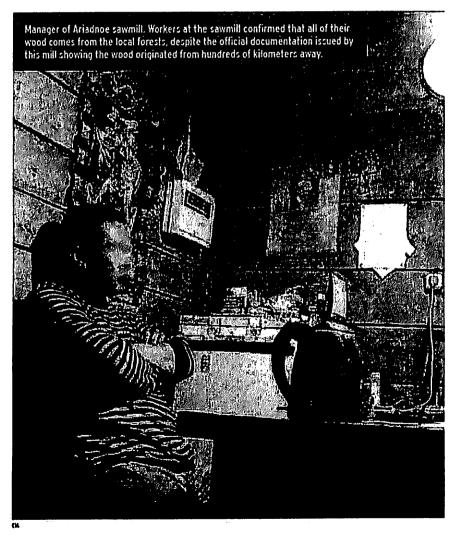
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Russian Villagers and a Chinese Sawmill

Many Chinese sawmill owners and traders described in detail to EIA investigators the difficulties they faced as business operators in Russia. In one case, investigators met with a small family who had emigrated from northeastern China over ten years ago, and who now run a remote sawmill deep inside Primorsky Province. All the workers, most from a single family, live and work within a walled compound on the edge of the small village of Ariadnoe in Dalnerechensk County. Workers at the sawmill contirmed that all of their wood comes from the local forests, despite the official documentation issued by this mill showing the wood originated from hundreds of kilometers away. When asked about illegal activities, the director referred to the Chinese concept of "night grass." According to a Chinese saying, in order to ensure that your cows grow fatter than those of your neighbors, you must not only feed them in the daytime as all your neighbors do, but you must also feed them extra at night. The phrase is commonly used to refer to illegal activities, in this case including bribery or forcery of permits. This sawmill reported having made profits of around USD \$200,000 last year.160

In the same village, investigators met with a local elected official who has been working for the past two years to get this and other illegal sawmills closed down. Despite having received confirmation that the mill is operating without the necessary permits, this official was unable to convince local police officials to take action.

In addition, local foresters and NGO representatives have on two occasions matched logs found in this sawmill to stumps from known illegal logging sites in the area. Faced with such evidence, local police have in both instances seized hundreds of cubic meters of logs. However, even despite such certainty, this sawmill remains in operation. Finally, in late 2012 this sawmill owner sold his mill to another Chinese owner and moved to a different part of Primorsky Province. Environmental groups in the region report that this same scenario plays out regularly in hundreds of small sawmills throughout the region.³⁰





E

"Guide on Sustainable Overseas Forest Management and Utilization by Chinese Enterprises"

In 2009, the Chinese State Forestry Administration (SFA) and the Ministry of Foreign Commerce (MOFCOM) promulgated a set of voluntary guidelines governing the conduct of Chinese overseas businesses in the forest industry, entitled the "Guide on Sustainable Overseas Forest Management and Utilization by Chinese Enterprises" (Guide). This Guide applies to "Chinese enterprises engaged in forest harvesting, wood processing and utilization, as well as other related activities in foreign countries." The Guide requires overseas operators to comply with the laws and regulations

of the countries in which they are operating. On paper, the Guide serves as an excellent foundation for Chinese companies to establish mutually beneficial, long-term relationships with these host countries, although as evidenced by trade data, official Russian enforcement documents, and undercover interviews, the Chinese operators in Eastern Russia rarely comply with the guidelines. These voluntary measures are ineffective in ensuring that Chinese businesses engage in proper business practices in the RFE.

EXCERPTS FROM THE "GUIDE ON SUSTAINABLE OVERSEAS FOREST MANAGEMENT AND UTILIZATION BY CHINESE ENTERPRISES"

IN PRINCIPLE

IN PRACTICE

#2.1.1, the "principle of national sovereignty"

"Chinese enterprises shall fully respect the ownership of the host country to its forest resources and strictly observe its laws, regulations and policies when managing and utilizing the forest resources in foreign countries."

- In practice, many Chinese sawmills regularly purchase logs from local Russian villagers without proper
 permits, thus encouraging illegal harvesting by Russians by providing an immediate market for illegally
 logged timber (For example, see "Russian Villagers and a Chinese Sawmill," p. 39). In some cases,
 Chinese sawmills locate themselves near illegal harvesting operations, in order to receive logs dragged
 directly from the forest to avoid checkpoints.
- Large Chinese timber companies admitted numerous direct violations of Russian law to undercover
 EIA investigators: overharvesting on their own Russian concessions; bribing local officials; purchasing
 a majority of their timber from other trading companies, which entails a high risk of illegal timber;
 complete disregard for legality (For example, see "Clearing Pipelines with the Government," p. 13).

#2.1.2, the "principle of mutually beneficial cooperation"

"Chinese enterprises shall make positive efforts to promote the local economic and community development, and conduct cooperation on the basis of mutual benefit when managing and utilizing the forest resources in foreign countries."

In practice, many Chinese sawmills contribute to the degradation of local forests as well as local
economic development. These sawmills hire mostly Chinese workers, and in cases where Russian
workers are hired they are often immigrants from other regions in Russia, or from former Soviet
republics in Central Asia or the Caucasus.

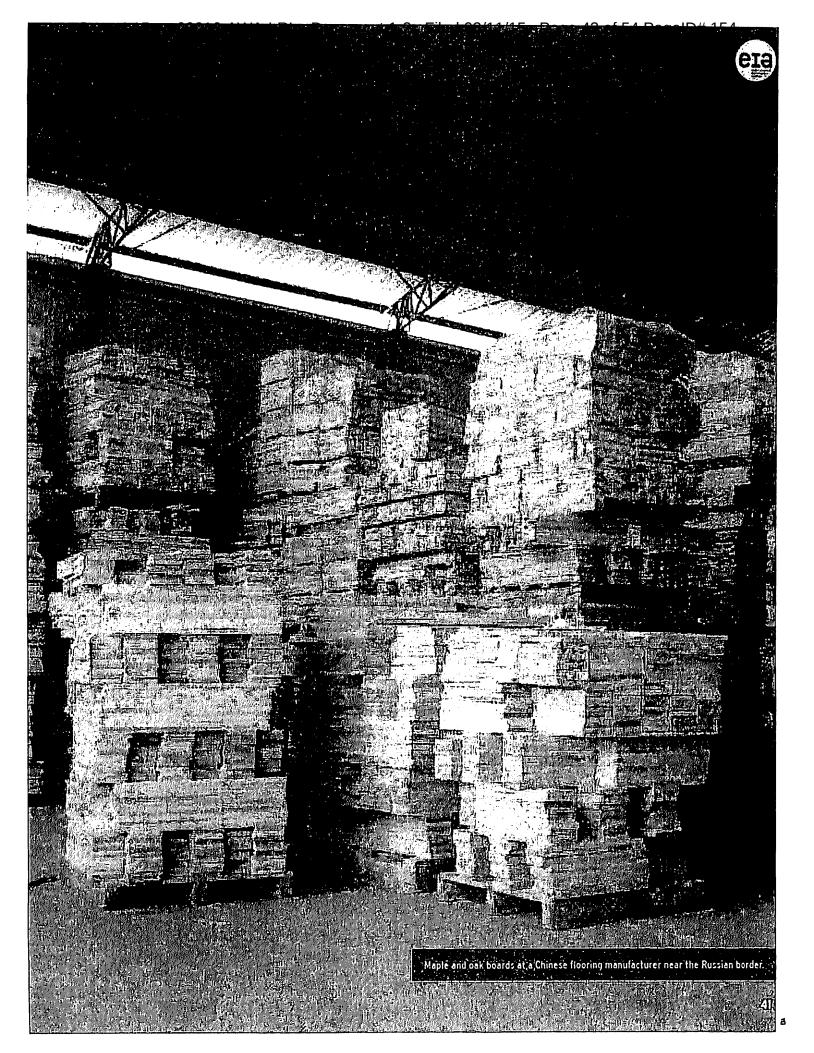
#2.1.5, the "principle of sustainable management and utilization of forests"

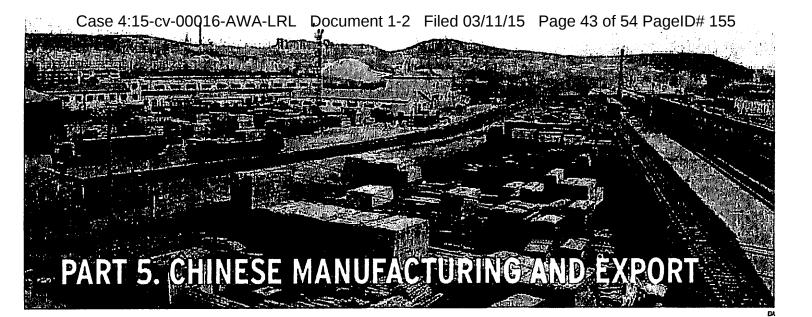
"Chinese enterprises shall play a positive role in sustainable development of local forests, and safeguard local ecological and environmental security when managing and utilizing the forest resources in foreign countries."

- The majority of Chinese traders source from Russian trading companies, and therefore have little if
 any awareness of the legal origins of their timber, much less a means of ensuring sustainable harvest
 or management. In practice, much of this timber is cut illegally in protective forests, with severe
 consequences on forest ecology. (For example, see "Xingjia's Hardwood Supplies: Obscure and Illegal
 Origins," p. 14).
- In cases where EIA investigators spoke with Chinese companies owning forest concessions in Russia, none appeared to make any significant efforts to manage these forests sustainably. Instead, some of these companies explained that they purchased forest land to obtain documents, in order to launder higher quality timber illegally cut elsewhere.
- EIA encountered many instances where forest authorities fined Chinese sawmills for purchasing wood
 illegally harvested from riparian zones and other protective areas.

These examples indicate the inherent weakness of voluntary measures in being able to ensure proper conduct of Chinese enterprises overseas; enterprises that are often key contributors to corruption and the pervasiveness of illegal logging throughout Eastern Russia. This highlights

the need for legally-binding regulations, to protect the sources of timber needed for the Chinese wood products industry, to level the playing field among Chinese businesses, and to protect the reputation of China's overseas investments and operations.





SUIFENHE: GATEWAY FOR RUSSIAN HARDWOODS

Just 15 years ago, Suifenhe was a lonely military outpost defending China's northeastern border with Russia. In 1999, a Border and Economic Cooperation Zone was established in the city to encourage garment manufacturing and timber processing, the first of its kind along the Russian border of Northeastern China.™ Since this time, the city has evolved to become the largest single entry point for timber from the RFE. According to official Russian customs statistics. Suifenhe received an estimated 70% of the RFE's hardwood exports in 2011.189 Suifenhe now acts as the chief milling and distribution center for Russian hardwoods, processing timber and sending it onwards to manufacturers and wholesalers throughout Northeastern China and beyond. The city is currently home to 274 registered companies active in the timber processing and trading industry.184

During the past six years, since EIA's 2007 report on the Russia-China timber trade, Suifenhe has undergone numerous changes. Most obvious is the expansion of the city: wood processing mills have spread up the valleys and hillsides surrounding the main river and rail tines; new construction has brought a suite of high-rise apartment buildings on the edge of a manicured man-made pond, as well as a new passenger high-speed rail line which is nearing completion, leading to the nearby city of Mudanjiang to the west.

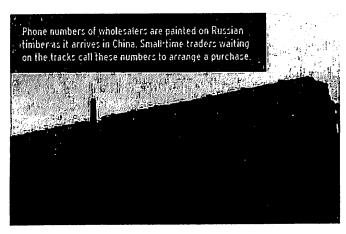
Observations at rail yards in Suifenhe paralleled trends affecting the wood trade in the RFE. First, in response to Russian export duties on logs and the corresponding growth of Chinese primary processing within Russia, the quantity of sawn timber arriving from Russia has increased, and the number of logs has decreased. Second, the average diameter of logs entering Suifenhe has visibly decreased, a trend echoed by Chinese industry representatives on both sides of the border, and an indication of the increasing degradation of

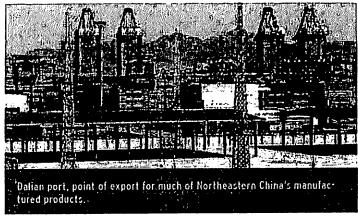
hardwood supplies in Eastern Russia as stocks of larger trees are felled and depleted.

LOG TRAINS ARRIVING AT THE STATION

In the 1990s, in order to stimulate export-based manufacturing, the Chinese government created a tax incentive for manufacturers who import raw materials destined for export as finished products. Only the original importer, who must register the raw material imports in a "customs book," may benefit from the scheme. In practice, however, licensed importers regularly sell this tax discount to other secondary manufacturers, while they themselves replace high-quality imported timber with low-quality domestically-harvested Chinese timber in their own export products (See "The Customs Book: Defrauding the Chinese Government on a Massive Scale," p. 44).

All timber imports into China must be accompanied by the required documentation, including the customs declaration form, contract, commercial invoices, bill of lading,







CHINA'S WOOD PRODUCT IMPORTS FROM TOP 10 PARTNERS, BY RWE VOLUME IN MILLIONS (M3)

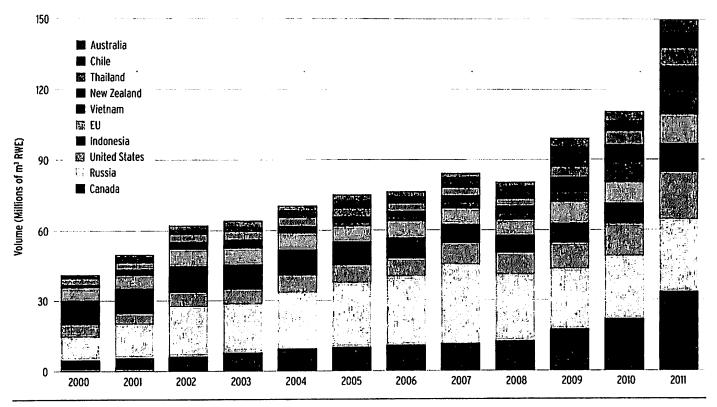


Figure 9: China's imports of timber, pulp, paper, and wooden furniture from Top 10 partners, by Roundwood Equivalent volume (m³). Source: Chinese customs, provided by UN Comtrade

packing list, certificate of origin, and certificate of plant quarantine. However, none of these documents contains information related to the legality or concession of origin of the timber. Most commonly, documentation for a single source is used for all timber in a shipment, despite the fact that single shipments are often mixed with wood from many traders, and many sources before arrival at the border. However, and the border.

The majority of imports into Suifenhe pass directly into designated rail spurs leased by the largest importing companies. Some shipments are imported by wholesalers, who sell the timber immediately upon import. Wholesalers often paint their phone numbers directly on the side of railcars before entry into China. After passing customs, these cars pull into the main rail yard in Suifenhe. At this point, dozens of small-time traders, alerted to the upcoming arrival, rush to call the phone numbers listed on the cars and negotiate purchases.

CHINA'S SHIFTING IMPORTS

China's imports of wood products have maintained steady growth despite the global economic recession in 2008. Figure 9 shows China's wood product imports from its top ten partners over the past decade. During this period, imports from sources at high risk for illegal logging have increased or remained steady. However, imports from countries with more

secure forest governance, including Canada, the United States, and the EU, tripled between 2008 and 2011. This trend in Chinese sourcing played a significant role in shifting the trade balance for U.S. forest products from a \$20.3 billion deficit in 2006 to a \$600 million surplus in 2010.¹⁸⁷

There are multiple reasons for this increased sourcing from lower risk countries.
Undoubtedly, this is partly due to factors of

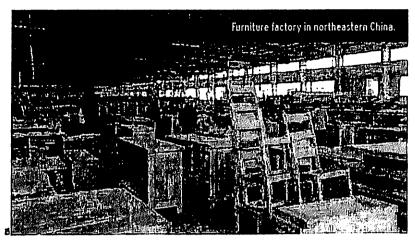
CHINA'S OAK IMPORTS 2011, RWE

RANK	SOURCE COUNTRY	RWE VOLUME (M³)	% OF TOTAL	LOGS/LUMBER
1	US	1,059,075 m³	53%	>90% lumber
2	Russia	483,665 m³	22%	80% lumber
3	EU	442,768 m³	20%	80% logs
4	Canada	26,385 m³	1.21%	Almost all lumbe
5	Ukraine	25,472 m³	1.17%	65% logs

Table 4: China's oak imports 2011, RWE.

Source: China customs data

The Customs Book: Defrauding the Chinese Government on a Massive Scale



The Chinese Customs Processing Trade (Registration) Book, commonly referred to as the "customs book," but a registration and reconciliation mechanism that records imported raw materials intended for processing and subsequent export by the same importer. The system was developed in the early 1980s to encourage China's export-based manufacturing economy, and the customs book serves as record of waived import duties, taxes and fees on the imported goods intended for export. EIA investigators were told of widespread fraud throughout this system, with both importers and exporters defrauding the Chinese government of millions of dollars in unpaid taxes and fees.

HOW THE SYSTEM WORKS, IN THEORY

A Chinese importer qualifies for a customs book by providing legitimate contracts representing sales of finished products to a specified foreign buyer, as well as contracts for the purchase and import of raw materials used in these particular products. The book details exact quantities of all materials imported under the contracts. Following manufacturing, customs officials at the point of export inspect finished products to ensure that these products match the quantities of raw materials listed in the customs book.

CHEATING USING THE CUSTOMS BOOK, IN PRACTICE

Many manufacturers EIA spoke with admitted to cheating on the customs book. Some went into detail in their explanations. All told a common story. Two main systems of fraud became apparent.

Under the simplest form, an importer in possession of both import and export contracts will obtain a customs book. The importer will then import high-quality Russian timber, registering exact quantities of timber in the customs book, thus avoiding various taxes and duties. He sells this high-quality timber at a premium on the Chinese

domestic market, where he subsequently purchases lowerquality Chinese timber. With this timber, he produces flooring or furniture for export. At point of export, Chinese customs officials register the export of finished products in the customs book.

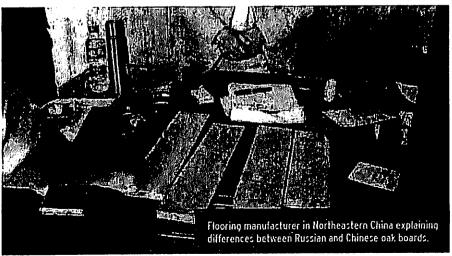
In another common variation, an export-based manufacturer who receives a customs book sells import rights to another company, who will import timber under the first company's name. Using this method, both companies benefit from a portion of the savings on unpaid taxes and duties.

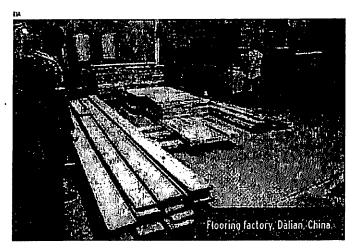
In general, cheating appears more likely in cases where quality and price differ substantially from the Chinese timber meant to replace the imported timber. Based on the frequency and openness of importers in conversations with undercover EIA investigators, cheating appears to be

common in the case of high-value Russian hardwoods, which can easily be swapped with lower-grade Chinese hardwoods.

LOSSES TO THE CHINESE GOVERNMENT

According to Chinese Customs Law, Chinese Customs bond raw materials or goods imported for the purpose of processing and then exporting for sale. The Under certain circumstance, Chinese Customs grants a permit and collects applicable duties and taxes on materials and goods imported for sale in China. Another clause specifies that duties and taxes are supposed to be imposed on goods made of raw materials from China if they are exported for sale. Failing to either get the permit or paying applicable duties and taxes is considered smuggling. The large number of companies who admitted this fraud openly to EIA, the high prolits that flow to importers who engage in these activities, and the fact that the Customs Book system applies to imports from all around the world, make it likely that the actual losses to the Chinese government reaches millions, or hundreds of millions, of dollars annually.







demand and availability. Increased export tariffs from Russia combine with recession driven declines in domestic manufacturing in the United States and other timber suppliers have made U.S. timber more appealing to Chinese manufacturers. However, undercover investigations reveal an increased interest in legal sourcing among some export-based Chinese manufacturers, due to concerns raised by buyers about compliance with the U.S. Lacey Act and the EU Timber Regulation.

CHINA'S RAPIDLY EXPANDING FLOORING INDUSTRY

Over the course of the 20th century, temperate hardwood based manufacturing grew in the northeastern provinces of Jilin and Heilongjiang, bordering North Korea and Russia. (See Figure 7, p. 29). After having largely depleted domestic hardwood resources by the 1990s, manufacturers in the region now provide an eager market for Russian exports from across the border. The northeastern port city

of Dalian is the region's largest port, providing excellent access to international markets and the rich hinterlands of northeastern China. The city and the surrounding area are home to many large export-focused manufacturers of furniture and flooring, including many international joint ventures.

Perhaps China's single largest cluster of flooring manufacturers is located around the cities of Huzhou and Nanxun, 100 km to the west of China's busling metropolis of Shanghai. The

CHINA'S DECLARED IMPORTS OF OAK LOGS AND LUMBER, BY RWE VOLUME (M3) IN MILLIONS, BY SOURCE COUNTRY

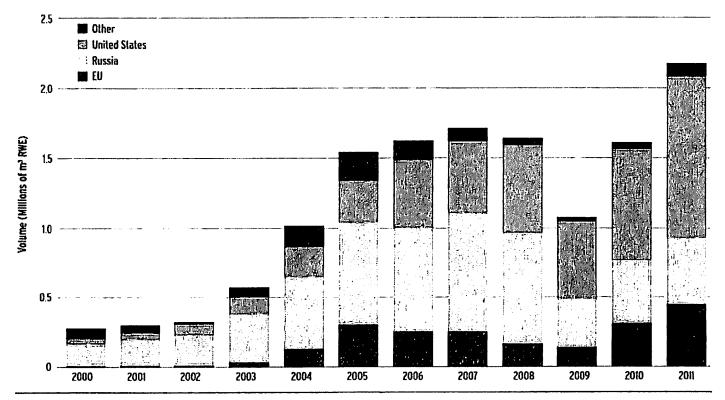


Figure 10 Source: China customs data

Sources of Timber in China

The Chinese domestic timber industry supplies, on average, 70-80 million m³ per year. 40% of Chinese domestic timber comes from plantations, with the remainder sourced from natural forests. In recent years, Chinese forestry has moved rapidly in favor of Fast Growing High Yield (FGHY) plantation forests, mostly made up of poplar (Populus spp.), Masson pine (*Pinus massoniana*), and Chinese fir (*Cunninghamia lanceolata*). In However, domestic production fills only around 35% of China's timber needs, with the remainder made up by imports (See Table 11, p. 46, and Table 12, p. 47).

Natural hardwood production forests are still active in northeastern China, providing species very similar to those obtained from the RFE, including oak, ash, birch, and linden. All Chinese forest lands are owned by the central government, but rights are assigned to state owned forest

farms or bureaus (including most of the natural hardwood forests), collective farms, and private enterprises. As of 2010, 1.3 million hectares of Chinese forest were FSC certified. However, much of this is designated conservation forest, and actual timber harvest quotas are low. In general, China's laws regarding domestic forestry are considered to be well established and adequately enforced. The considered to be well established and adequately enforced.

Mixed broadleaved secondary forests cover northeastern China, as the result of widespread clear-cutting decades ago. Although this timber is of inferior quality to old-growth Russian timber, these forests might be expected to be ready to fill future demand for a manufacturing sector moving steadily towards engineered, end-jointed, and composite wood products.

RELATIVE VOLUME OF IMPORTS AND DOMESTIC TIMBER PRODUCTION IN CHINA

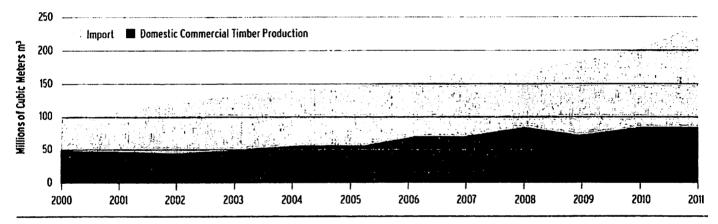


Figure 11: Timber Supply in China.

Source: China Customs, complied by Forest Trends; China's Forestry Statistical Yearbook (various issues), China Forestry Publishing House.

region around the southern city of Guangzhou is the third concentrated manufacturing center for wood products, including those from Russia. As industrial capacity of interior China develops, more and more Russian timber is shipped to interior cities such as Xian, Chengdu, and Lanzhou. In general, northeastern manufacturers use more Russian hardwoods, whereas those around Shanghai tend more towards engineered and laminate flooring, using imported hardwoods from tropical and temperate regions around the world, as well as domestic plantation-grown products including poplar (*Populus spp.*), Chinese fir (*Cunninghamia lanceolata*), Masson pine (*Pinus massoniana*), and bamboo (*Bambuseae*).

The Chinese flooring industry is one of the largest single consumers of Russian hardwoods. Over the past ten years, China has grown from a minor player to the largest supplier of flooring in the world. During this short period, Chinese manufacturers have transitioned rapidly from relatively simple manufacturing of solid flooring to the more technologically complex products such as engineered, laminated, and parquet flooring. Relatively low wages make Chinese manufacturers particularly competitive in the labor-intensive process of making wood flooring.

Solid wood flooring consists simply of boards around 3/8 in (15 mm) thick, milled on the edges

to link together. The face is often prefinished in the factory with stain and a protective veneer, and often undergoes various treatment processes such as acid washing and handscraping to add an "antique" appearance.

Engineered hardwood flooring is a composite product containing three to twelve glued layers of thin wood veneers, with a 3-5 mm face of hardwood on top. Interior layers for Chinese-made engineered floors commonly consist of faster-growing species such as Chinese domestic plantation poplar or Russian or Chinese white birch. Laminated flooring is similar to engineered flooring, except that the

top layer of hardwood is replaced with a thin plastic coating, printed to resemble real wood.

Higher-quality hardwoods are greatly valued for solid flooring and facing for engineered flooring due to their durability and appearance. While every log can produce a range of both high and lower quality boards, old-growth Russian hardwoods, by virtue of having grown thick, straight, and relatively branch-free, generally contain a higher proportion of this high-quality material.

However, the Chinese flooring industry is adept at making use of timber of a variety of species and grades from around the world. Port facilities in Dalian, Shanghai, and Guangzhou provide ready access to temperate hardwoods from the U.S. and the EU. Manufacturers source raw materials from wholesalers, importing companies, or import directly; most use a combination of sources. Companies and wholesalers alike source these woods according to cost and quality, shifting rapidly from one source country to another as prices change.

China's oak imports over the past decade, shown in Table 4, p. 43, provide an illustrative example of the steadily increasing and shifting import trends characteristic of many timber species. Since 2000, China's oak imports have increased to nearly ten times pre-2000 levels. Despite a significant dip during the global recession in 2009, imports have quickly rebounded, and now continue along their



previous upwards trajectory. Imports from the U.S. make up a steadily increasing percentage of wood imported into China. Imports from Russia likewise continue to grow, despite Russian harvest quotas that limit the harvest of oak to less than half of the actual wood currently being exported from the RFE to China. Oak imports from the EU are shipped primarily from

Germany, France, and Belgium, although in some cases this limber is sourced originally from Eastern Europe.

Table 4, p. 43, shows that the majority of oak imports from Russia now come in the form of sawn lumber. Oak continues to be harvested domestically in northeastern China. Although total quantities remain unknown as publicly

DOMESTIC TIMBER CONSUMPTION IN CHINA

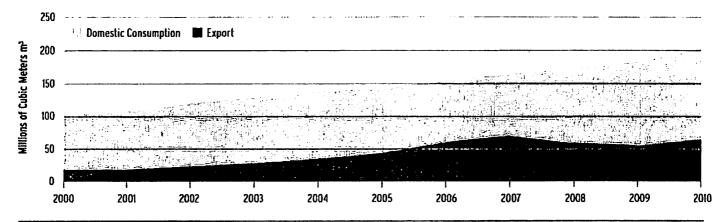


Figure 12: Timber Supply in China. Note: Domestic consumption is simply calculated as domestic timber production + imports - exports. Stocks and wood for farmers' own uses (fuel wood mostly) are not included

Source: China Customs, compiled by Forest Trends; China's Forestry Statistical Yearbook (various issues), China Forestry Publishing House.

Xingjia and the Customs Book

Dalian Xingjia's logistics manager explained the Customs Book system in detail to investigators:

Mr. Du: There are two types of export – one is trade with imported materials, in this case registered on customs books; these other type is what is called "normal trade" type, in that case you do not need to declare anything but species, but you are subject to paying a 10% export tax. Then there are these companies with legitimate customs books, we send money to buy them [the quotas under their customs books].

EIA: Do you save all your tax?

Mr. Du: No, no, this way we reduce the cost of tax, since we have to pay them money to use their status, because the company charges you money for using their customs books. They charge 600 RMB (Renminbi, Chinese currency. Exchange rate approx. 6 RMB = \$1 USD) for a small container, 10,000 RMB for the big one. So really 10%, minus the fees we pay them, is what we save, about 50% of total tax [that we would have to pay].

EIA: Then do you use your name, or their name?

Mr. Du: Yes, we use their name, the customs book holder, all paperwork will have their name. Even the shipper will be that company, but you will sign the contract with us.

EIA: Won't this cause us problems with US customs?

Mr. Du: I do not think it would be a problem for you. If you feel you might, then we can have two contracts, one for actual trade, the other just for you to clear US customs.**



available official statistics lack species-level data, most sources indicate that Chinese oak makes up only a small proportion of oak timber on the Chinese market.

CHINESE EXPORT OF FURNITURE AND FLOORING

Most of the furniture and flooring produced in northeastern China is exported through the port of Dalian, although Russian hardwoods and softwoods end up in products manufactured throughout China. In total, Chinese manufacturers exported nearly \$20 billion worth of hardwood furniture and flooring in 2012. The United States (33%), European Union (17%), and Japan (7%) are the largest markets.²⁰² China has quickly become the dominant import partner for the United States, comprising 55% of total imports in 2009.²⁰³

Figures 13 and 14, p. 49, show the continually strong growth in furniture and flooring exports from China over the past decade. While exports to China's major trading partners reflect most of the recent growth, new partners in the Middle Easl, South America, and Africa indicate shifting demand towards new markets.

CHINESE DOMESTIC CONSUMPTION

Given the rapid increase in other parts of China's economy, it is perhaps unsurprising that Chinese manufacturers and official Chinese statistics indicate a steady increase in Chinese domestic consumption of wood products in recent years.

Domestic timber consumption can be calculated as a function of domestic timber production, plus imports, minus exports. In 2011, approximately 81 million m³ of domestic timber was produced (not counting stocks and wood for farmers' own uses), while 155 million m³ of timber products were imported. Exports totaled 74 million m³, giving a rough estimate for total domestic consumption at 162 million m³.²⁰⁴ (See Table 3, p. 31).

The Chinese domestic market for wood products has experienced significant growth in recent years. Today, China is the world's largest market for flooring, driven largely by the burgeoning real estate sector. In 2012, China's wood flooring market sales totaled 377 million m². 205 Chinese manufacturers reported that they can earn up to 40% more on the local Chinese market than on exports. They also report that Chinese consumers demand higher quality products, as the industry is largely focused on the newly rich. This demand for high quality products favors sourcing from Russia, with its old-growth forests.

CHINA'S TOP 10 EXPORT PARTNERS - FLOORING

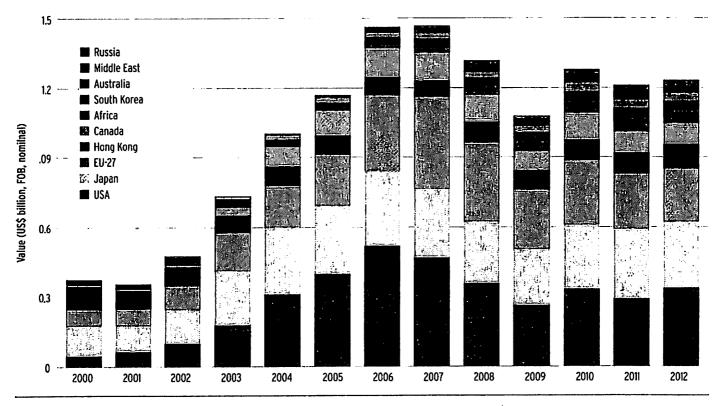


Figure 13 Source: China customs data

CHINA'S TOP 10 EXPORT PARTNERS - WOODEN FURNITURE

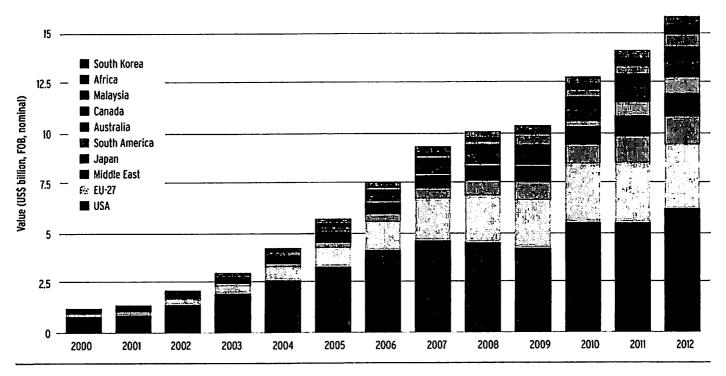
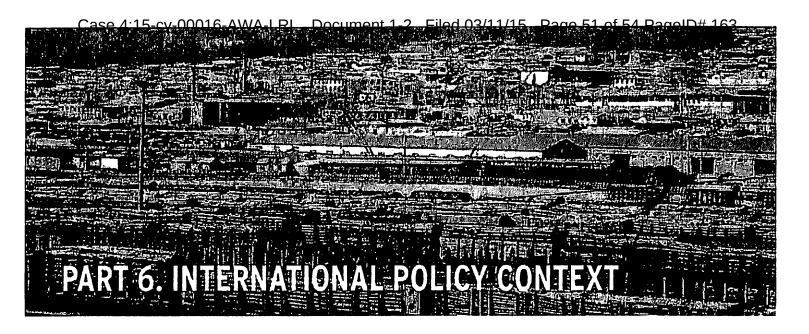


Figure 14 Source: China customs data



Illegal logging remains a pervasive and significant threat to the environment, sustainable development and the rule of law. According to a 2012 UNEP and INTERPOL report, "illegal logging accounts for 50-90 per cent of the volume of all forestry in key producer tropical countries, and 15-30 percent globally. So Global illegal logging is now estimated to be worth between USD \$30 and USD \$100 billion." The world found that illegal logging artificially depressed world prices by 7% - 16% on average, and U.S. prices by 2% - 4%, depending on the product.

For more than a decade, the global illegal logging crisis has been recognized repeatedly in international policy commitments to be driven largely by indiscriminate market demand and the corresponding international trade in wood products. In 2005 at the Gleneagles Summit, leaders of the G8 countries pledged, "We agree that tackling illegal logging requires action by both timber producing and consuming countries. We will act in our own countries. We will take steps to halt the import and marketing of illegally logged timber." Since that time, concern and attention to the issue has continued to increase and many leading consumer governments have responded by enacting new policies to stem the flow of illegally sourced wood products. The United States, the European Union, and Australia have all enacted new laws that prohibit the import of illegally sourced wood products and require importers to conduct due diligence in what was previously a "no questions asked" market. By creating powerful incentives for industry to trade in legal timber, these new laws are yielding a systemic shift in the global

markel. A recent report credits such laws with contributing to a 22% decrease in illegal logging around the world.²⁰⁹

THE UNITED STATES LACEY ACT

In 2008, the United States was the first to pass a new law banning import and inter-state commerce of illegally sourced timber and wood products, with overwhelming bipartisan support from Congress, industry, labor and environmental organizations.²⁰

The Lacey Act sets a groundbreaking precedent for the global trade in plants and plant products, acknowledging and supporting other countries' efforts to govern their own natural resources and putting in place powerful incentives for companies trading in these commodities to do the same. Indeed, as Mohamed Prakosa, Indonesia's former Minister of Forestry succinctly stated, "expecting or asking one country to combat illegal logging while at the same time receiving or importing illegal logs of course does not support efforts to combat these forest crimes."211 The impact of these new laws is already rippling through the global timber industry, improving how companies make material sourcing decisions and monitor their supply chains, and demonstrating a proven significant positive impact. Since the law was passed, an influential coalition of industry, labor and environmental organizations have aggressively supported the new law and have played an important role in its smooth implementation.

The Lacey Act also requires importers to provide a basic declaration to accompany every shipment of plants or plant products into the

For more than a decade, market demand and the corresponding international trade in wood products has been recognized repeatedly in international policy commitments as a major driver of the global illegal logging crisis.

United States, including the country of harvest, species, value and quantity of each shipment. The declaration process has fundamentally transformed previously opaque timber supply chains around the globe. The increased level of questioning establishes a new level of transparency in business practices and provides critical new information to enforcement agencies about trade routes and the origin of products consumed in the United States.

The Lacey Act also imposes dissuasive penalties that correspond with the severity of the crime. Penalties for violating the Lacey Act vary in severity based on the violator's level of knowledge about the products; penalties are higher for those who knew or should have known through the exercise of due care that they were trading in illegally harvested materials. "Due care" is a flexible legal concept that has evolved over time in the United States

to mean the "degree of care which a reasonably prudent person would exercise under the same or similar circumstances." Due care "is applied differently to different categories of persons with varying degrees of knowledge and responsibility."22 and "the standard is generally high in a commercial context,"213 However, the Lacev Act imposes strict liability with respect to the seizure and forfeiture of illegal goods; in other words, if the imported wood is illegal, the government may seize it regardless of whether or not the importer knew it was illegal.

THE EUROPEAN UNION: FOREST LAW ENFORCEMENT. **GOVERNANCE AND TRADE**

The EU has also taken definitive actions to stem the flow of illegal timber into its member country markets. Beginning in 2003, the EU developed the EU Forest Law Enforcement Governance and Trade (FLEGT) Action Plan to ensure illegal timber does not enter its markets, to improve the supply of legal timber and to increase the demand for responsibly sourced wood products.

One of the central components of this approach is the EU Timber Regulation (EUTR), which passed in July 2010 and came into force in March 2013. The EUTR bans the import of illegal timber and requires importers to undertake comprehensive due diligence to ensure illegal products are excluded from their supply chains. As part of their due diligence requirements under the EUTR, importers must assess the risk of illegal timber entering their supply chains and, if more than negligible risk is identified, undertake risk mitigation measures, including requiring additional information and verification. Given the clear high risk of illegality in the RFE, importers should exercise extreme caution when sourcing hardwoods like Russian oak, ash, elm or linden. Failure to conduct due diligence is a violation of the EUTR and should be taken very seriously by both enforcement and industry.

While this report focused on clarifying supply chains from Russia Lhrough China to the US, it is quite likely that the European Union similarly imports significant volumes of hardwood flooring made from Russian oak. Roughly,

20% of China's exports of hardwood flooring are destined for Western Europe. Independent evaluation of European imports, however, remains difficult due to the lack of publicly available customs and import data.

AUSTRALIAN ILLEGAL LOGGING PROHIBITION ACT

Further solidifying the momentum behind efforts to stem the global trade in illegal wood products, Australia passed a comparable policy in November 2012 prohibiting import of illegal timber and requiring importers to conduct due diligence. The Act also imposes significant penalties for violations of the new requirements. While the bill was being drafted, a Senate committee review of the proposed legislation noted that the bill should "be aligned with other international regimes...(which) minimizes the cost of compliance, quards against product substitution, and helps facilitate greater compliance amongst exporting countries."24 As more countries enact illegal logging prohibitions, care should be taken by the international community to ensure coherence among them.

CANADIAN REGULATIONS AGAINST IMPORT OF ILLEGALLY HARVESTED TIMBER

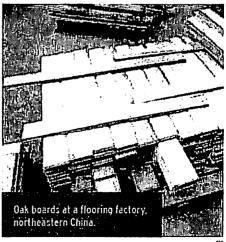
While Canada has been less active in international policy discussions regarding illegal logging and is generally not included in the list of importing countries that have passed demand side measures to address illegal logging, its CITES implementing legislation does prohibit importation of illegally harvested timber.20 While the legislation narrowly defines "animal" and "plant" as any species of animal or flora that is listed in the CITES appendices. the implementing regulations broaden the definition to any species known to have been illegally acquired. Unlike the US, EU and Australian laws, Canada does not yet require the importer to conduct any form of due diligence or due care, which has proven a key component to transforming the way importers conduct their sourcing practices. At the time of writing, EIA is not aware of any timber-related enforcement actions in Canada.

JAPAN: THE WORLD'S 3RD **LARGEST WOOD PRODUCTS** MARKET NEEDS TO ACT

While Japan has made international commitments to tackle illegal logging, it has not yet lived up to its promises. Japan took a step in the right direction following the 2005 G8 Gleneagles Summit by amending its Green Procurement Law to require only legally sourced wood products in public procurement, but it now lags noticeably behind other key consumer nations by failing to adopt comprehensive, robust and enforceable regulatory measures to prevent imports of illegal wood products. The Green Procurement Law only requires the use of legal wood products for public procurement, but there is no such requirement for the rest of the market. This means that over 95% of the wood products consumed by Japan are not subject to this type of regulation regarding legality. Moreover, even the public procurement law is relatively weak, as there is limited government oversight of the system and no penalties for non-compliance.

CHINA: THE "BLACK BOX" FOR ILLEGAL TIMBER AND **FOREST PRODUCTS**

China is now the world's largest timber trader. with a significant role in the global industry as both a major processing center and an increasingly significant consumer of forest products in its own right. In recent years, the Chinese State Forest Agency (SFA) has become more engaged in international policy dialogues regarding illegal logging. However, further progress in the fight against illegal logging



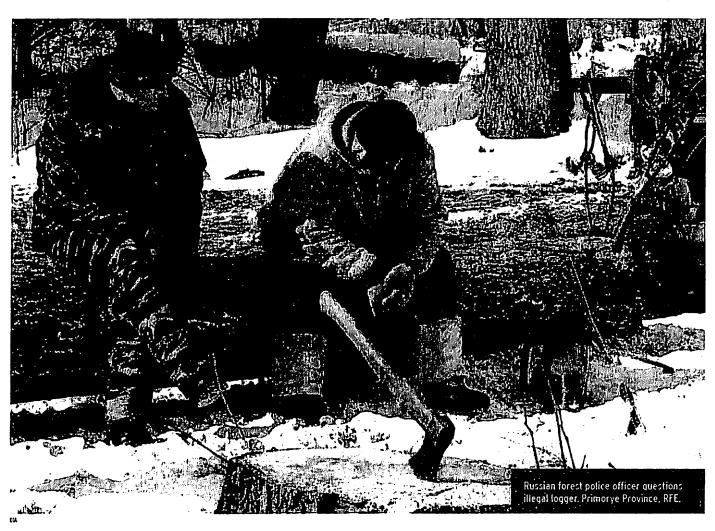
will require greater action from China. Chinese efforts so far, comprised entirely of voluntary measures, have not succeeded in stemming the massive flow of illegal timber into China, timber that is then manufactured into products often sold in large consumer country markets.

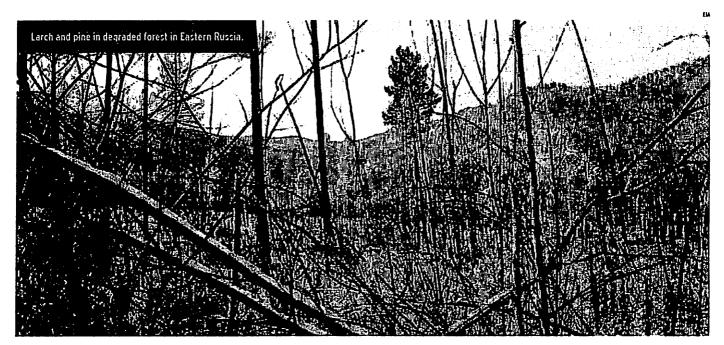
While many major timberimporting countries have enacted prohibitions on illegal timber imports, China has failed to take comparable action. Since 2002, China has signed a series of bilateral cooperation agreements to address illegal logging and associated trade with both producer and consumer countries, including Indonesia, Myanmar, the United States and the EU. While these initiatives provide important forums for dialogue, information sharing and learning – and appear to have resulted in some limited action to address discrete instances of illegal logging – they are not sufficient to stem the massive flow of illegal timber into China.⁷¹⁶

In 2009, China also introduced the "Guide on Sustainable Overseas Forest Management and Utilization by Chinese Enterprises," emphasizing the responsibility of Chinese forestry companies operating overseas to abide by host-country laws and to practice sustainable forest management. The Guide serves as a useful model, which, if followed, would allow Chinese companies to establish

mutually beneficial, long-term relationships with these host countries. However, as evidenced by trade data, undercover interviews, and in this case official Russian enforcement documents, the actions of many Chinese operators in Eastern Russia illustrate the extreme limitations of such voluntary measures to compel industry to operate legally around the globe or to encourage sustainable business practices (See "The Customs Book: Defrauding the Chinese Government on a Massive Scale," p. 40, for details).

In November 2011, China released a draft timber legality program, entitled, "China Timber Legality and Verification Scheme (TLVS)." The scheme has a number of key deficiencies as it currently stands. First, it only applies to timber for export, and ignores timber destined for domestic consumption.





Chinese domestic consumption of foreignsourced timber and forest products is rapidly accelerating, making this an equally important concern for legality and sustainability, especially for hardwoods. Tracking timber through the opaque Chinese wood products manufacturing sector from import to export also remains a serious challenge. By not including the domestic market in the scope of the policy, the TLVS provides no assurances that companies will track "legal" limber destined for export and keep it separate from that destined for the Chinese market. It is therefore likely that the TLVS will have limited success assisting Chinese industries in complying with new laws in the United Stales, the European Union and Australia. Second, it provides no details about penalties for non-compliance. Third, and most importantly, the draft does not include any legally binding prohibition on the associated trade in illegal timber, a feature essential for credible implementation.27 This program remains a draft proposal, and there is no concrete plan for official enactment or guidelines for implementation.

While many major timber-importing countries have enacted prohibitions on illegal timber imports, China has failed to take comparable action. China's economy remains heavily dependent on its export-based manufacturing sector, which includes the growing wood

products manufacturing sector. Similarly, domestic forestry operations are growing in China. Enacting a prohibition on illegal imports will both facilitate export to countries with laws in place and help ensure sustainable supply, as well as prevent the burgeoning Chinese domestic industry from being undercut by cheap, illegal goods.

A GLOBAL RESPONSE IS NECESSARY

There is no doubt that slopping the illegal logging crisis requires a global response. New regulations prohibiting import of illegallysourced wood products in the United States, EU, and Australia are transforming market behavior and decreasing global illegal logging rates around the world. However, the positive effects of these new laws are fundamentally undermined by the failure of the world's largest timber importer, China, and third largest importer, Japan, to take concrete action to prohibit illegally-sourced imports, alongside some large corporations such as Lumber Liquidators, which despite these new laws knowingly continue to buy the riskiest wood available in the world today.

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